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ASTRONOMICAL
DIARIES AND RELATED TEXTS
FROM BABYLONIA

HERMANN HUNGER

Volume VI

Goal Year Texts

ÖSTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN
PHILOSOPHISCH-HISTORISCHE KLASSE
DENKSCHRIFTEN, 346. BAND

ASTRONOMICAL DIARIES AND RELATED TEXTS FROM BABYLONIA

Volume VI
Goal Year Texts

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VERLAG DER ÖSTERREICHISCHEN AKADEMIE DER WISSENSCHAFTEN
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Preface

The texts in this volume were to a large part known to A. Sachs, but only in a few cases had he prepared transliterations. Errors should therefore be attributed to me. I made my transliterations from the original tablets or from the copies in LBAT, and then collated them with the originals again or with photographs.

The datable texts are arranged by the "Goal-Year", the undated ones by museum number.

Publication, as usual, took longer than I expected; this had the advantage that material found later could be included. For information about such additional texts I am obliged to Christopher Walker and John Steele.

I thank the Trustees of the British Museum for permission to publish the tablets in London, and the University Museum in Philadelphia for permission concerning their tablets.

G. R. F. Assar read the manuscript and saved me from several errors.

Vienna, May 2006

Hermann Hunger

Abbreviations

ACT	O. Neugebauer, <i>Astronomical Cuneiform Texts</i> , London 1955
AOAT	<i>Alter Orient und Altes Testament</i> (Kevelaer/Neukirchen-Vluyn)
Astral Sciences	H. Hunger and D. Pingree, <i>Astral Sciences in Mesopotamia</i> , Leiden 1999
HAMA	O. Neugebauer, <i>A History of Ancient Mathematical Astronomy</i> , Berlin/Heidelberg/New York 1975
Huber and De Meis	P. J. Huber and S. De Meis, <i>Babylonian Eclipse Observations from 750 BC to 1 BC</i> , Milano 2004
JCS	<i>Journal of Cuneiform Studies</i> (New Haven etc.)
LBAT	<i>Late Babylonian Astronomical and Related Texts</i> , copied by T. G. Pinches and J. N. Strassmaier, prepared for publication by A. J. Sachs, Providence 1955
OrNS	<i>Orientalia</i> , Nova Series (Rome)
PD	R. A. Parker and W. H. Dubberstein, <i>Babylonian Chronology 626 B.C. - A.D. 75</i> , Providence 1956
SEAC 5th	<i>Actes de la Vème Conférence Annuelle de la Société européenne pour l'Astronomie dans la Culture</i> , Gdansk 1999
SSB	F. X. Kugler, <i>Sternkunde und Sterndienst in Babel</i> , Münster 1907-24
TU	F. Thureau-Dangin, <i>Tablettes d'Uruk</i> , Paris 1922
ZA	<i>Zeitschrift für Assyriologie</i> (Leipzig etc.)

Introduction

This volume comprises all the texts known to me that conform to the category 'Goal Year text' as defined by A. J. Sachs in his ground-breaking article in JCS 2 (1948) 282-285. I simply repeat his words here: (the Goal Year texts present) 'raw materials for the prediction of planetary and lunar phenomena for a given year, which I will henceforth call the "goal year"'. Additional descriptions and discussions of Goal-Year texts can be found in A. Sachs, *Philosophical Transactions of the Royal Society* 276 (1974) 43-50; O. Neugebauer, HAMA 554f.; D. Pingree, *Astral Sciences*, 167-173; L. Brack-Bernsen, in: N. M. Swerdlow (ed.), *Ancient Astronomy and Celestial Divination* (1999), 157-167.

Contents

Usually, a Goal Year text consists of 8 sections: § 1 and 2 for Jupiter, § 3 for Venus, § 4 for Mercury, § 5 for Saturn, § 6 and 7 for Mars, and § 8 for the Moon.

§ 1 contains the first visibilities, first stationary points, acronychal risings, second stationary points and first invisibilities of Jupiter, 71 years before the Goal Year.

§ 2 contains the passings by of Normal Stars¹ by Jupiter, 83 years before the Goal Year.

§ 3 contains first visibilities and first invisibilities, as well as passings of Normal Stars, by Venus, 8 years before the Goal Year.

§ 4 contains the same for Mercury, 46 years before the Goal Year.

§ 5 contains the first visibilities, first stationary points, acronychal risings, second stationary points and first invisibilities, as well as passings of Normal Stars, of Saturn, 59 years before the Goal Year.

§ 6 contains the first visibilities, first stationary points, acronychal risings, second stationary points and first invisibilities of Mars, 79 years before the Goal Year.

§ 7 contains the passings by of Normal Stars by Mars, 47 years before the Goal Year.

§ 8 is subdivided into three sections: first, the sum of the intervals ŠÚ+na and the sum of ME+GE₆, for the second half of the year preceding the Goal Year by 19 years. Second, reports of eclipses of moon and sun, 18 years before the Goal Year. Finally, Lunar Six for the year preceding the Goal Year by 18 years.

The title of a Goal Year text is: 'First days, appearances, passings and eclipses which are established for year x', where x is the Goal Year.

While most Goal Year texts begin with the planetary section, a few have the lunar section first.

Terminology

Most of the formulaic expressions in Goal Year texts correspond to those in the Diaries.

a) Passings ('conjunctions'):

Only passings of the planets by Normal Stars are listed in the Goal Year texts; lunar positions do not have suitable periods. They are always introduced by the sign GE₆ 'Night', followed by the day number. Then the part of the night is indicated, but only USAN or ina ZÁLAG, 'first

¹ A table of the most frequent Normal Stars (and the meaning of this designation) has been given in Vol. I p. 17-19; for additional Normal Stars, see N. A. Roughton - J. M. Steele - C. B. F. Walker, *Archive for the History of the Exact Sciences* 58 (2004) 537-572.

part of the night' or 'last part of the night' respectively, occur. After this, the name of the planet begins the statement of the passing. It is to be noted that the planet name is repeated for each passing, although within a section only one planet is dealt with. This may be because the sentences are most likely copied from Diaries where the observations are in chronological sequence, so that the planet needs to be identified.

Since the planets mostly move slowly enough that one can wait for the day when they are exactly above or below a star, usually only the distance above or below is given. Only with fast moving Venus (very rarely Mars) do we occasionally find distances in front of and behind.

During retrograde motion, the words *ana ŠÚ ina LAL-šú* 'during its going back to the west' are added after the planet name. Similarly, the first observation after second station is marked by *ana NIM ina LAL-šú* 'during its going back to the east', after the planet changed direction again.

b) 'Greek-letter phenomena':

Of the so-called 'Greek-letter phenomena' of the planets, the Goal Year texts contain:

For the inner planets: first visibilities and invisibilities², in east and west.

For the outer planets: first visibilities and invisibilities, stationary points and acronychal risings.

Greek-letter phenomena are introduced by the day number (preceded by a month name, if applicable) only. Here too the planet name is repeated with each phenomenon. The zodiacal sign is always noted. Sometimes the distance to a star or a planet ('in front of' or 'behind') is given in addition.

First visibility is IGI, first invisibility is ŠÚ. The Akkadian equivalent of IGI is the N-stem of *amāru* 'to become visible', that of ŠÚ *rabū* 'to set'.

For stationary points, the following expression is used:

1st station: (Planet name) *ana NIM kī UŠ-ú ina* (Zodiacal sign) UŠ

2nd station: ŠÚ UŠ-*a*

'When (Planet) became stationary to the east/west, it became stationary in (Zodiacal sign)'.

UŠ is probably a logogram for some form of *emēdu*, most likely the N-stem, which is attested for 'becoming stationary' (ACT p. 472b). The phonetic complements -*ú* or -*a* would normally indicate a verb ending in a long vowel, but I cannot offer a suitable candidate. The complement is consistently always -*ú* in case of eastern stations, and -*a* in case of western stations. I am convinced that this is an artificial difference, and that the verb is the same in both cases.

Acronychal rising is written *ana ME E-a*. As can be seen from other texts³, ME here is a logogram for *ūmu* 'day', and E stands for E₁₁, logogram for *elū* 'to go up, to rise'. The phrase would mean 'it came up to day(light)', which fits the definition of acronychal rising as 'last rising after sunset': the planet's rising could still be observed whereas a day later the planet had already risen before it became visible after sunset.

A terminological problem is the word *in* (more rarely *ina*) occurring frequently before day numbers of planetary phenomena (it never occurs before the dates of passing Normal Stars). Since day numbers also occur without *in*, it must have some additional meaning. Following Sachs, I have translated *in* by 'around' (already in the translations of the Diaries). However,

² I let myself convince that by ŠÚ the texts refer to the first day when a planet (or star) could not be seen any more, not to the last day when it could be seen. In the translations, I have nevertheless kept 'last appearance' for reasons of consistency.

³ TU 17, see H. Hunger, Festschrift für W. von Soden. Alter Orient und Altes Testament, Band 240 (1995) 105-118.

this is unlikely in those cases where an ideal date for the phenomenon is given: there is no point in calling the ideal date approximate, when it is given after evaluation of the interval between sunrise/sunset and the first visibility of a planet. I have therefore, inconsistently, translated 'on (day x)' in these cases. Another use of *in* where it clearly means 'on, at' is for time indications in eclipse reports.

In the Goal Year texts, *in* is especially frequent with first and last visibilities, and occurs also with acronychal risings.

Before day numbers of the stations of the outer planets we also find the signs EN and *ina* EN; but only some of the stations are marked by these signs. Unfortunately, their use is not correlated with eastern or western station. Furthermore, stations of Mars and Saturn sometimes have *in*, without EN, before the day number.

Certainly incorrect is the provisional translation of *in* EN by 'until around', which I have used for these passages so far. I have not been able to identify what makes the difference between the instances with EN and those without it. EN is otherwise used as a logogram for *adi* 'until', but this is impossible here because two prepositions cannot follow each other. EN occurs in two texts from Uruk, A 3456 and IM 44152, see vol. V No. 82; there I have assumed an abbreviation or variant for USAN 'first part of the night'. This cannot fit the use of EN in the references to stations because the stations are not restricted to the first part of the night.

c) The Lunar section:

The Babylonians observed certain time intervals around conjunction and opposition of moon and sun, which A. Sachs called the 'Lunar Six'⁴. They are:

After conjunction:

na time from sunset to moonset

Around opposition:

ŠÚ time from moonset to sunrise

na time from sunrise to moonset

ME time from moonrise to sunset

GE₆ time from sunset to moonrise

Before conjunction:

KUR time from moonrise to sunrise

These are certainly abbreviations of phrases describing the intervals. Sachs transcribed *na* in italics because he believed it to be an abbreviation of an Akkadian word. ME and GE₆ probably represent the words *ūmu* 'day' and *mūšu* 'night', but the phrases from which they are abbreviated remain uncertain.

The first part of the lunar section gives sums of the two pairs ŠÚ + *na* and ME + GE₆ for the second half of the year 19 years before the goal year. L. Brack-Bernsen called these intervals 'Lunar Four' and explained the use of their sums⁵.

The second part of the lunar section contains eclipse reports of the same kind as in the Diaries; such reports also occur separately.⁶

⁴ Defined in JCS 2 (1948) 281.

⁵ Centaurus 37 (1994) 183-209.

⁶ See Vol. V, Nos. 14 - 33.

The third part contains 'Lunar Six' for the year 18 years before the Goal Year. In addition, at the beginning of each monthly paragraph, the number of days in the previous month is indicated by the numbers '30' or '1', meaning that the previous month had 29 or 30 days, respectively. After the interval *na*, additional remarks about the circumstances of the first appearance of the crescent are noted.

There are three possible sequences of the four intervals observable around full moon:

- (1) ŠÚ - ME - *na* - GE₆: corresponding day numbers are x, x+1, x+1, x+2;
- (2) ŠÚ - *na* - ME - GE₆: corresponding day numbers are x, x+1, x+2, x+3;
- (3) ME - ŠÚ - GE₆ - *na*: corresponding day numbers are x, x, x+1, x+1.

If on a damaged tablet only the day numbers are preserved, one can still restore the names of the intervals - not of course their values.

At the end of each paragraph, the interval KUR is listed.

d) Weather

As in the Diaries, remarks about the weather frequently accompany the observations. The most common are:

DIR 'clouds', followed by NU PAP 'I did not watch' or *muš* 'measured'. *muš* also occurs alone after an interval. I am not sure that the understanding of *muš* as an abbreviation for *muššuh* 'measured' is correct. Why was the interval sometimes measured and (one would suppose) sometimes not? Particularly strange is the combination KUR₄ *a-pir muš* 'it was bright; earth-shine; measured' which occurs quite often at the beginning of the month.

Another impediment of observation is *akamu* (written *a-kam*, or abbreviated *a*) 'mist'.

Purpose

As already noted by Sachs, producing a Goal-year text from existing Diaries is not an easy task. Since the data are needed from different years, one has to look in quite a number of Diaries.

According to Pingree⁷, the known Diaries do not contain all the data necessary for compiling a Goal-year text. This impression seems to stem from the incompleteness of the actually preserved Diaries. In principle, however, all the data found in Goal Year texts are present in the Diaries. That a particular Diary may lack certain observations does not exclude that they were present in another one. Only a fraction of the Diaries has been preserved. There are very likely additional ones still in the ground, but since the find spots are unknown, it is practically impossible (especially today) to dig for them.

Some of the data in Goal Year texts are not observations and must have been calculated in some way. Whenever the remark NU PAP 'I did not watch' accompanies a statement giving a numerical value, we have to assume that the value given was calculated. Similarly, ideal dates for appearances must come from calculation or at least estimation.

The purpose of the Goal Year texts seems obvious: to make predictions for the Goal year. One cannot, however, simply use the data from one period earlier; small corrections are necessary. This was known to the Babylonians, as can be seen from several texts listing such corrections⁸. Further research may show one day which corrections were applied.

Among the texts preserved, the so-called Almanacs and Normal-Star Almanacs⁹ consist of predictions for a given year. They do, however, contain data not available from the Goal Year texts: dates of solstices, equinoxes, and Sirius phenomena; and the Almanacs give in addition

⁷ Astral Sciences 172.

⁸ O. Neugebauer and A. Sachs, JCS 21 (1967) 200-208.

⁹ For a description, see A. Sachs, JCS 2 (1948) 277-282 and D. Pingree, Astral Sciences, 159-167. I plan to edit them in Vol. VII of this project.

the dates of planets' entries into zodiacal signs. If they were compiled with the help of Goal Year texts, the additional material must have come from other sources.

The relationships between the different kinds of non-mathematical astronomical texts remain uncertain.

Concordance of Museum Numbers

British Museum

BM	No.	BM	No.
32154 +32408	5	34149	22
32222	20	34150	65
32228	3	34163	40
32286	6	34186	67
32293	29	34207	116
32342	96	34216 +35080	23
32358	97	34238	117
32408 +32154	5	34269	118
32426	98	34290	119
32434	99	34292 +34388	60
32443 +34894 +35386	15	34301	120
32457	100	34321	121
32495 (+) 32504	16	34337	122
32504 (+) 32495	16	34359	60
32512	101	34376	123
32538 +32603	102	34378	124
32547	103	34388 +34292	60
32566	21	34397	125
32603 +32538	102	34405	73
32616	104	34408	126
32628	25	34411	63
32633	105	34422	127
32770	106	34430	128
32941	107	34455 +35398	71
32948	108	34498	43
32964	109	34506	129
32986	33	34509	73
33457 +47916	79	34579 +36006	35
33472	54	34595	49
33481	66	34603	46
33495	110	34615	50
33522 + 33569 + 33580 + 33814	92	34625 +55543 +34741	7
33533	93	34631	130
33604	111	34646 +35026	63
33608	112	34649	131
33756	113	34658 +35787	62
33823	39	34675	132
34034	69	34691 +45809	9
34037	47	34698	133
34044	48	34717	26
34048	31	34741 +34625 +55543	7
34053 +92682	86	34759	4
34070 +77254 +77239	2	34849	19
34097	114	34867	58
34132	115	34889	134
34145	52	34894 +35386 +32443	15

Concordance of Museum Numbers

BM	No.	BM	No.
34906	135	40110 +40086	74
34932	45	40114	151
34946	83	40606	152
34956	136	40864	153
34968 +35040	53	40866 +41130	45
34969 +35467	61	40993	154
34996	137	41072	38
35026 +34646 (+)34411	63	41098	24
35036	57	41108	70
35040 +34968	53	41130 +40866	45
35080 +34216	23	41167	155
35121	138	41275	84
35168	139	41527	18
35181	17	41571 + Rm 778	76
35221	30	41643	12
35223	140	41654	156
35278	141	41847	90
35295	142	41954	157
35317	88	41958 +132275	73
35334+35696 (+)35036	57	42007	158
35341 (+)34658+35787	62	42021	159
35342	64	42057	76
35386 +34894 +32443	15	42106	160
35387	36	42141	161
35388	10	42148	94
35398 +34455	71	42777	72
35420	77	42779	162
35453	73	45609	163
35467 +34969	61	45626	28
35475 +35879 + 47874	85	45651	44
35534	80	45661 +46170	41
35587	42	45773	78
35696	57	45786 +45909 +46113 +46146	27
35719	81	45787 +46057	14
35787 +34658	62	45794 +45834	51
35879 +35475 + 47874	85	45809 +34691	9
35902	143	45815	164
35917	144	45824	165
35921	89	45834 +45794	51
35956	87	45877	166
35985	145	45880	167
35990	146	45881	55
36006 +34579	35	45909 +45786 +46113 +46146	27
36012	147	45993	75
36023	148	46057 +45787	14
36772	11	46098	168
37005	149	46100	169
37105	150	46103	170
38405	68	46113 +46146 +45786 +45909	27
40086 +40110	74	46126	171

BM	No.
46146 +46113 +45786 + 45909	27
46163	59
46170 +45661	41
46180 +46217	172
46212	173
46217 +46180	172
46218	174
47874 + 35475 + 35879	85
47916 +33457	79
47928	56
55515 +55521	37
55519	8
55521 +55515	37
55533	34
55543 +34625 +34741	7
55560	32
77222	175
77239 +34070 +77254	2
77254 +34070 +77239	2
92682 +34053	86
132275 +41958	73
132286	45
DT 207	95
Rm 739	13
Rm 763 +Rm 946	91
Rm 768	177
Rm 778 + 41571 + 42057	76
Rm 835	178
Rm 946 +Rm 763	91
University Museum, Philadelphia	
CBS 17	82
CBS 717	176
Musée des Antiquités, Rouen	
HG-x	1

Concordance of Publications

LBAT	No.	LBAT	No.
*1213	1	1261	76
1214 +*1215	2	1262	45
*1215 +1214	2	1263	46
**1216 +*1217	5	1264	47
*1217 +**1216	5	1265	48
**1218	6	*1265a	51
1219 +1220 +*1221	7	1266	50
1220 +*1221 +1219	7	1267	49
*1221 +1220 +1219	7	1268	52
*1222	8	1269 +1270	53
1223 +1224	9	1270 +1269	53
1224 +1223	9	*1271	55
1225	10	1272 (+)1345	57
1226	13	1273	58
*1227	11	*1274	59
1228	12	1275 +1276 (+)1316	60
1229 +1230	14	1276 +1275 (+)1316	60
1230 +1229	14	1277 +1278 (+)1279	62
*1231 + 1232 +1233	15	1278 +1277 (+)1279	62
1232 +1233 +*1231	15	1279 (+) 1277+1278	62
1233 +1232 +*1231	15	1280 + 1281 (+) 1322	63
*1234	16	1281 + 1280 (+) 1322	63
1235	17	1282	64
1236	18	1283	67
*1237	20	*1284	68
1238	22	1285	69
1239 +1240	23	*1286	70
1240 +1239	23	1287 +1325	71
*1242	24	*1288	74
1243	26	1289	76
*1244 +*1245	27	1290	76
*1245 +*1244	27	1291	77
1246	28	1292	78
1247	30	*1293	79
*1248	29	1294	81
1249	31	**1295	82
*1250	32	1296 +**1297	86
1251 +1252	35	**1297 +1296	86
1252 +1251	35	1298	57
1253	36	1299	87
*1254 + *1255	37	1300	88
*1255 +*1254	37	1301	91
*1256	39	1302	90
1257	40	1303	94
1258	83	1304	27
1259	41	1305	130
1260	44	1306	114

XVIII		Concordance of Publications	
LBAT	No.	LBAT	No.
1307	115	1361	161
1308	65	1362	163
1309	116	1363	43
1310	117	1364	134
1311	118	1365	131
1312	119	1366	4
1313	120	1367	19
1314	121	1384 (+)1320 (+)1327 (+)1339	73
1315	122	1484	137
1316 (+) 1275+1276	60		
1317	123		
1318	124	OrNS 2, 97ff.	7
1319	125	OrNS 2, 100ff.	5
1320 (+)1327 (+)1339 (+)1384	73	OrNS 2, 105ff.	6
1321	126		
1322 (+) 1280 + 1281	63	SSB I 84ff.	35
1323	127		
1324	128	ZA 6, 217ff.	82
1325 +1287	71	ZA 6, 229f.	86
1326	129	ZA 6, 231ff.	20
1327 (+)1320(+)1339(+)1384	73		
1328	132		
1329	133		
1330	135		
1332	136		
1333	138		
1335 +1344	61		
1336	139		
1337	140		
1338	141		
1339 (+)1320(+)1327(+)1384	73		
1340 +1343	85		
1341	142		
1342	80		
1343 +1340	85		
1344 +1335	61		
1345 (+) 1272	57		
1346	42		
1348	143		
1349	89		
1350	145		
1351	146		
1352	147		
1353	148		
1354	159		
1355	144		
1356	156		
1357	160		
1358	157		
1359	158		

Dated Goal-year Texts

No. 1

HG-x (Musée des Antiquités, Rouen)

Listed as LBA *1213

Goal year: SE 76

The tablet cannot now be found in the Musée des Antiquités. The abbreviation 'HG' refers to Henri de Genouillac; the tablet probably came to the Musée together with objects from his excavation. The text below is based on a transliteration by A. Sachs (see pl. 1).

Side A

- 1' [x]+5 na GU₄²-UD² 'x x x' [...]
 2' x na in² x IGI GE₆ 23 ina [ZÁLAG ina NIM]
 3' ina GU ŠÚ ŠE 29 GU₄-[UD ina ŠÚ ina x IGI]

 4' MU-17-KAM ¹Se-lu-ku [LUGAL]
 5' ina ZÁLAG GENNA [SIG] MAŠ-MAŠ IGI 'x' [...]
 6' APIN G[E₆²] 5 ina ZÁLAG GENN[A SIG MAŠ-MAŠ ár]
 7' AB GE₆ '11² [US]AN [GE]NNA SIG M[ASŠ-MAŠ IGI]

 8' [x x x] 'x x' SI ŠE² 'x x x' [...]
 9' [x x x x] 'x' UŠ DU₆² 26 AN ana [ME E-a]

 10' [...] 'x x x'

Side B (at right angles)

I

- 1' [14] 'x' ME muš
 2' [14] 11,40 na DIR muš
 3' '15' 10 GE₆ muš
 4' [2]6² 10,30 KUR

 5' [GU₄ x] 13 na KUR₄
 6' [...] 'x' ŠÚ
 7' [...] M]E DIR muš
 8' [...] n]a muš
 9' [...] 'GE₆ muš'

II

- 1' [x] 'x 30 x' [...]
 2' [x] 'x' 6,30 GE₆ 'x'
 3' 'x' 27 16 K[UR]

 4' KIN 30 13 a NU IGI [...]
 5' 1[3 x] ME mu[š]
 6' 13 [x ŠÚ]
 7' 14 'x' GE₆
 8' 14 9 na 'muš'

No. 1

Side A

- 1' sunset to setting of Mercury: [x]+5° [...]
 2' rising of Mercury to sunrise: x°; (ideal) first appearance on the xth. Night of the 23rd, last [part of the night,]
 3' [Mercury's] last appearance [in the east] in Aquarius. Month XII, the 29th, Mer[cury's] first appearance in the west in

 4' Year 17, [king] Seleucus. [...]
 5' last part of the night, Saturn was [below] α Geminorum [...]
 6' Month VIII, ni[ght] of the 5th, last part of the night, Saturn was [.... below β Geminorum]
 7' Month X, night of the 11th², first part of the night, Saturn was [....] below α [Geminorum]

 8' [...] [...]
 9' [...] it became stationary [...] Month VII², the 26th, Mars' acro[nychal rising]

 10' [...]

Side B (at right angles)

I

- 1' [The 14th,] moonrise to sunset:; measured.
 2' [The 14th,] sunrise to moonset: 11° 40'; measured (despite) clouds.
 3' The 15th, sunset to moonrise: 10°; measured.
 4' [The 2]6th², moonrise to sunrise: 10° 30'.

 5' [Month II,] sunset to moonset: 13°; it was bright.
 6' [The xth,] moonset to sunrise:
 7' [The xth,] moonrise to sunset: [...]; measured (despite) clouds.
 8' [The xth,] sunrise to moonset: [...]; measured.
 9' [The xth,] sunset to moonrise: [...]; measured.

II

- 1' [The xth,] 30' [...]
 2' [The xth,] sunset to moonrise: 6° 30';
 3' The 27th, moonrise to sunrise: 16°.

 4' Month VI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13°; mist, I did not see (the moon) [...]
 5' The 1[3th,] moonrise to sunset: [...]; measured.
 6' The 13th, [moonset to sunrise:]
 7' The 14th, sunset to moonrise:
 8' The 14th, sunrise to moonset: 9°; measured.

- 9' 28 12,10 KUR
-
- 10' DU₆ 1 16 KUR₄
 11' 13 2,40² ME
 12' 13 50 NINDA ŠÚ
 13' 14 4,30 GE₆
 14' 14 12 'na muš'

III

- 1' 10+[x]
 2' 10+[x]
 3' 20+[x]
 4' ŠE [....]
 5' 10+[x]
 6' 10+[x]
 7' 10+[x]

Comments

Side A 2': the last appearance mentioned in the beginning of l. 3' is in the east, in the middle of month X, according to computation. On X 23 in the morning, Mercury was above Mars.

6': On VIII 5, Saturn was below β Geminorum.

8': this must refer to Mars phenomena in year -314/313, year 2 of Alexander, son of Alexander, or year 3 of Antigonus. I cannot make the traces conform to either of these names.

No. 2

BM 34070 (= Sp 166 + 81-2-1,46) + 77239 (= 83-6-30,19) + 77254 (83-9-28,5)

Copy: LBA 1214 (34070); 77254 listed as LBA *1215

Photo: Pl. 2f.

Bibliography: L. Brack-Bernsen, SEAC 5th (1999) 19

Goal year: SE 79

Upper edge

- 1 ina a-mat^dEN u^dGAŠAN-ia liš-lim

Obv.

- I
 1 MU-1-šu-KAM
 2 'An-ti-u-uk-su LUGAL
 3 DU₆ 13,50 ŠÚ u na
 4 6,30 ME u GE₆
 5 APIN 13,20 ŠÚ u na
 6 'x' ME u GE₆
 7 [GAN] 13,50 ŠÚ u na
 8 [x]+20 ME u GE₆

- 9' The 28th, moonrise to sunrise: 12° 10'.

- 10' Month VII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 16°; it was bright.

- 11' The 13th, moonrise to sunset: 2° 40'.

- 12' The 13th, moonset to sunrise: 50'.

- 13' The 14th, sunset to moonrise: 4° 30'.

- 14' The 14th, sunrise to moonset: 12°; measured.

III

- 1' The 10+[xth,]

- 2' The 10+[xth,]

- 3' The 20+[xth,]

- 4' Month XII, [....]

- 5'-7' The 10+[xth,]

No. 2

Upper edge

- 1 At the command of Bel and Beltija may it go well.

Obv.

- I
 1 Year 60,
 2 king Antiochus.
 3 Month VII, 'moonset to sunrise' plus 'sunrise to moonset': 13° 50'.
 4 'moonrise to sunset' plus 'sunset to moonrise': 6° 30'.
 5 Month VIII, 'moonset to sunrise' plus 'sunrise to moonset': 13° 20'.
 6 'moonrise to sunset' plus 'sunset to moonrise':
 7 [Month IX,] 'moonset to sunrise' plus 'sunrise to moonset': 13° 50'.
 8 'moonrise to sunset' plus 'sunset to moonrise': [x]+20'.

9	'AB'	10+[x]	'ŠÚ' <i>u na</i>
10		13	'ME' [u] GE ₆
11	ZÍZ	11,20	ŠÚ <i>u na</i>
12		14,10	ME <i>u</i> G[E ₆]
13	ŠE	9,10	ŠÚ <i>u na</i>
14		13,20	ME <i>u</i> GE ₆

15	MU-1-š <u>u</u> -1-KAM		
16	¹ An-ti-š <u>u</u> -uk-su LUGAL		
17	GU ₄ GE ₆ 29		
18	AN-KU ₁₀ šamáš BAR DIB		
19	in 10 UŠ GE ₆ ana ZALÁG		
20	'SIG' 14 A[N-K]U ₁₀ šin		
21	[x] 'x' [x x] DIB		
22	[in] 'x' ME ana ŠÚ šamáš		
23	[x G]E ₆ 29		
24	[AN-KU ₁₀] 'šamáš' šá DIB		
25	[in 1,2]4 GE ₆ ana ZALÁG		
26	[GAN GE ₆ 1]3		
27	[x x TI]L-ti GAR		
28	[....] 'x'		

II

1	MU-1-š <u>u</u> -1-KAM		
2	¹ An-ti-š <u>u</u> -uk-su LUGAL		
3	BAR 30 20,50 'x' DIR NU PAP		
4	13	6	ŠÚ DIR NU PAP
5	14	3	na DIR NU PAP
6	15	3,30	ME DIR NU PAP
7	16	13	GE ₆ DIR NU PAP
8	27	9 ²	KUR
9	GU ₄ 30 13,50 DIR NU PAP		
10	14	4 ¹ ,20	ŠÚ DIR NU PAP
11	'15'	[x?],10	ME DIR NU PAP
12	15	4,20 ²	na muš
13	16	5	GE ₆
14	27	15,30	KUR
15	SIG 1 22 muš		
16	14	2,50	ŠÚ
17	15	10	NINDA ME
18	15	8	na muš
19	16	17	GE ₆
20	27	13,40	KUR
21	ŠU 30 13,40 muš		

9	Month X,	'moonset to sunrise' plus 'sunrise to moonset': 10+[x°]
10		'moonrise to sunset' plus 'sunset to moonrise': 13°.
11	Month XI,	'moonset to sunrise' plus 'sunrise to moonset': 11° 20'.
12		'moonrise to sunset' plus 'sunset to moonrise': 14° 10'.
13	Month XII,	'moonset to sunrise' plus 'sunrise to moonset': 9° 10'.
14		'moonrise to sunset' plus 'sunset to moonrise': 13° 20'.

15	Year 61,	
16	king Antiochus.	
17	Month II, night of the 29th,	
18	solar eclipse, BAR, omitted.	
19	At 10° before sunrise.	
20	Month III, the 14th, lunar eclipse	
21	[....] [....] omitted.	
22	[At] before sunset.	
23	[...., ni]ght of the 29th,	
24	solar [eclipse] which was omitted.	
25	[At 8]4° before sunrise.	
26	[Month IX, night of the 1]3th,	
27	[....] it made a total (eclipse).	
28	[....]	

II

1	Year 61,	
2	king Antiochus.	
3	Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 20° 50'; clouds, I did not watch.	
4	The 13th,	moonset to sunrise: 6°; clouds, I did not watch.
5	The 14th,	sunrise to moonset: 3°; clouds, I did not watch.
6	The 15th,	moonrise to sunset: 3° 30'; clouds, I did not watch.
7	The 16th,	sunset to moonrise: 13°; clouds, I did not watch.
8	The 27th,	moonrise to sunrise: 9° ² .
9	Month II, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 50'; clouds, I did not watch.	
10	The 14th,	moonset to sunrise: 4° ² 20'; clouds, I did not watch.
11	The 15th,	moonrise to sunset: [x° ²] 10'; clouds, I did not watch.
12	The 15th,	sunrise to moonset: 4° 20' ² ; measured.
13	The 16th,	sunset to moonrise: 5°.
14	The 27th,	moonrise to sunrise: 15° 30'.
15	Month III, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 22°; measured.	
16	The 14th,	moonset to sunrise: 2° 50'.
17	The 15th,	moonrise to sunset: 10'.
18	The 15th,	sunrise to moonset: 8°; measured.
19	The 16th,	sunset to moonrise: 17°.
20	The 27th,	moonrise to sunrise: 13° 40'.
21	Month IV, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 40'; measured.	

22	14	13,40	ŠÚ <i>muš</i>
23	15	6	ME NU PAP
24	15	1	<i>na</i> NU PAP
25	16	15	GE ₆ NU PAP
26	28	12,20	KUR <i>a</i> NU PAP

III

1	IZI 1 17 <i>ina šamáš</i> GUB IGI		
2	14	5	ME
3	14	5,10	ŠÚ
4	15	5,20	GE ₆
5	15	12,40	<i>na muš</i>
6	27	19,30	KUR
7	KIN 1 20 KUR ₄ <i>ina šamáš</i> GUB IGI		
8	13	8,10	ME NU PAP
9	13	8,50	ŠÚ
10	14	2,30	GE ₆
11	14	7	<i>na muš</i>
12	27	12	KUR
13	DU ₆ 30 11		
14	13	12,40	ŠÚ
15	14	1,50	ME
16	14	1,10	<i>na</i>
17	15	6,40	GE ₆
18	27	24	KUR
19	APIN 1 11		
20	13	8	ME <i>muš</i>
21	13	4,40	ŠÚ
22	14	1,50'	GE ₆
23	14	12,20	<i>na muš</i>
24	28	9	KUR <i>ki</i> PAP NU IGI

IV

1	GAN 1 12 [...]		
2	12	8,20	'ŠÚ' [...]
3	13	7,20	ME [...]
4	13	4	<i>na</i>
5	14	5,20	GE ₆ DIR N[U PAP]
6	27	15,50	KUR
7	AB 1 22,20 DIR NU PAP		

22	The 14th,	moonset to sunrise: 13° 40'; measured.
23	The 15th,	moonrise to sunset: 6°; I did not watch.
24	The 15th,	sunrise to moonset: 1°; I did not watch.
25	The 16th,	sunset to moonrise: 15°; I did not watch.
26	The 28th,	moonrise to sunrise: 12° 20'; mist, I did not watch.

III

1	Month V, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17°; it could be seen while the sun stood there.	
2	The 14th,	moonrise to sunset: 5°.
3	The 14th,	moonset to sunrise: 5° 10'.
4	The 15th,	sunset to moonrise: 5° 20'.
5	The 15th,	sunrise to moonset: 12° 40'; measured.
6	The 27th,	moonrise to sunrise: 19° 30'.
7	Month VI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 20°; it was bright, it could be seen while the sun stood there.	
8	The 13th,	moonrise to sunset: 8° 10'; I did not watch.
9	The 13th,	moonset to sunrise: 8° 50'.
10	The 14th,	sunset to moonrise: 2° 30'.
11	The 14th,	sunrise to moonset: 7°; measured.
12	The 27th,	moonrise to sunrise: 12°.
13	Month VII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 11°.	
14	The 13th,	moonset to sunrise: 12° 40'.
15	The 14th,	moonrise to sunset: 1° 50'.
16	The 14th,	sunrise to moonset: 1° 10'.
17	The 15th,	sunset to moonrise: 6° 40'.
18	The 27th,	moonrise to sunrise: 24°.
19	Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 11°.	
20	The 13th,	moonrise to sunset: 8°; measured.
21	The 13th,	moonset to sunrise: 4° 40'.
22	The 14th,	sunset to moonrise: 1° 50'.
23	The 14th,	sunrise to moonset: 12° 20'; measured.
24	The 28th,	moonrise to sunrise: 9°; when I watched I did not see it.

IV

1	Month IX, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 12° [...]	
2	The 12th,	moonset to sunrise: 8° 20' [...]
3	The 13th,	moonrise to sunset: 7° 20' [...]
4	The 13th,	sunrise to moonset: 4°.
5	The 14th,	sunset to moonrise: 5° 20'; clouds, [I did not watch.]
6	The 27th,	moonrise to sunrise: 15° 50'.
7	Month X, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 22° 20'; clouds, I did not watch.	

8	12	2	ŠÚ <i>muš</i>
9	13	4,30	ME <i>muš</i>
10	13	11	<i>na muš</i>
11	14	7	GE ₆
12	26	28,30	KUR
13	ZÍZ 30	17,30	
14	12	4,30	ŠÚ
15	13	13,40	ME <i>muš</i>
16	13	5,30	¹ <i>na muš</i> ¹
17	14	2,10	G[E ₆]
18	27	10	KUR [....]
19	ŠE 30	13,20	DIR N[U PAP]
20	13	20	NINDA ŠÚ DIR [....]
21	14	8	ME DI[R]
22	14	10	UŠ <i>na</i> [....]
23	15	7	GE ₆ [....]
24	27	15	KUR [....]
25	DIR 1	26,30	¹ x ¹ [....]

The following lines are written across the width of the tablet:

29 [....] ¹x x x MU-8-KAM¹ ¹Se-lu-ku LUGAL
 30 [....] ^{it}u⁶DU₆ 14 MÚL-BABBAR *ina* SAG *zib* UŠ
 31 [....] (blank)

32 [....] ¹x¹ GU *ia-a-nu*

33 [....] ¹x x x¹ [....]

¹Rev.

1' [....] ¹x¹ [....]

2' [....] ¹x x x x x¹ 19²

3' [....] ¹x¹

4' [....] ¹x x¹

5' [....]

6' [....] ¹x¹ [....]

7' [....] ¹x x¹ [....] ¹x¹ [x] ¹na²¹ [....]

8' [....] *ina* ŠÚ *ina* PA ¹IGI² 7² 30 x¹ [....] ¹x¹ [....]

9' [....] šá KIR₄ šil ¹PA x x x¹ [....]

10' [....] ¹ŠÚ² *ina*¹ GU IGI ¹x¹ [....]

11'-12' (broken)

13' [x] ¹x USAN¹ [....]

14' [MU]-5-KAM ¹An-t[i-gu-nu-us]

15' ¹ŠE²¹ *in* 18 AN [....] IGI [....]

8	The 12th,	moonset to sunrise: 2°; measured.
9	The 13th,	moonrise to sunset: 4° 30'; measured.
10	The 13th,	sunrise to moonset: 11°; measured.
11	The 14th,	sunset to moonrise: 7°.
12	The 26th,	moonrise to sunrise: 28° 30'.
13	Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 17° 30'.	
14	The 12th,	moonset to sunrise: 4° 30'.
15	The 13th,	moonrise to sunset: 13° 40'; measured.
16	The 13th,	sunrise to moonset: 5° 30'; measured.
17	The 14th,	sunset to moonrise: 2° 10' [....]
18	The 27th,	moonrise to sunrise: 10° [....]
19	Month XII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 20'; clouds, I did not [watch.]	
20	The 13th,	moonset to sunrise: 20'; clouds, [....]
21	The 14th,	moonrise to sunset: 8°; clouds, [....]
22	The 14th,	sunrise to moonset: 10° [....]
23	The 15th,	sunset to moonrise: 7° [....]
24	The 27th,	moonrise to sunrise: 15° [....]
25	Month XII ₂ , the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 26° 30' [....]	

The following lines are written across the width of the tablet:

29 [....] year 8, king Seleucus.

30 [....] Month VII, the 14th, Jupiter became stationary in the beginning of Pisces.

31 [....] (blank)

32 [....] Aquarius not there.

33 [....] [....]

¹Rev.

1' [....] [....]

2' [....] 19²

3' [....]

4' [....]

5' [....]

6' [....] [....]

7' [....] [....] [....]

8' [....] first appearance in the west in Sagittarius; [....] [....]

9' [....] θ Ophiuchi [....]

10' [....] first appearance in Aquarius [....]

11'-12' (broken)

13' [....] first part of the night, [....]

14' [Year] 5, Ant[igonius]

15' Month XII², around the 18th, Mars' [first appearance]

- 16' MU-31-KAM ¹Se-[*lu-ku u* ¹An-ti-u-uk-su LUGAL^{meš}]
 17' GE₆ 20+¹x¹ [....]
 18' BAR GE₆ 10+[x]
 19' GE₆ 17 [....]
 20' SIG GIŠ.K[UN A]
 21' US[AN[?]]
 (space)
 22' U₄-1-[KAM]

Comments

Obv. I 17-19: solar eclipse of -250 May 25.

20-22: lunar eclipse of -250 June 10.

23-25: solar eclipse of -250 June 24; restored from No. 3:11'.

26-28: lunar eclipse of -250 Dec. 4; this eclipse is also listed in BM 34759:3ff., see Huber and De Meis p. 119.

II 3: the sign before DIR could be KUR₄ 'bright'; but this does not fit the rest of the line.

Rev. 14': the year preceding the goal-year SE 79 by 79 years (as required for this paragraph) is Antigonus year 6; therefore, the mention of Antigonus year 5 must be due to some important detail from the previous year, probably its intercalary month VI₂.

15': a first appearance of Mars in year 6 of Antigonus took place on XII 22.

16': as in the preceding paragraph, SE 31 is one year earlier than the year required. This is proven by the mention of month I only two lines later, which must belong to year 32.

No. 3

BM 32228 (= 76-11-17, 1955)

Photo: Pl. 2f.

Goal Year: SE 79

'Obv.

- 1' [....] ¹x¹ [....]
 2' [....] (blank)
 3' [MU-....] ¹šá¹ ší-i MU-6-KAM IZI in 21
 4' [AN ina x ŠÚ DIR-ŠE AN ina zib]^{me} IGI
 5' [MU-31-KAM DIR-ŠE GE₆ x USAN AN e MÚL IGI šá ALLA šá S]¹ 2 SI GE₆ 25
 USAN AN SIG MÚL ár šá ALLA šá SI 2 U
 6' [MU-32-KAM G]U₄ GE₆ 6 USAN AN e LUGAL 10 SI GE₆ 17 USAN
 7' [AN e MÚL TUR šá 4 KÜŠ ár LUGAL nn mm SIG GE₆ x US]AN AN SIG GIŠ.KUN
 A 4½ KÜŠ GE₆ 21 USAN AN

- 16' Year 31, [kings] Seleucus.[and Antiochus]
 17' Night of the 20+[xth,]
 18' Month I, night of the 10+[xth,]
 19' Night of the 17th, [....]
 20' below θ Leo[nis]
 21' first [part of the night?]
 (space)
 22' First days, [....]

No. 3

'Obv.

- 1' [....] [....]
 2' [....] (blank)
 3' [Year] which is year 6. Month V, around the 21st,
 4' [Mars' last appearance in Month XII₂,, Mars'] first appearance [in Pis]ces.
 5' [Year 31, Month XII₂, night of the xth, first part of the night, Mars was] 2
 fingers [above η Can]cri. Night of the 25th, first part of the night, Mars was 2 fingers
 below γ Cancri.
 6' [Year 32, Mon]th II, night of the 6th, first part of the night, Mars was 10 fingers
 above α Leonis. Night of the 17th, first part of the night,
 7' [Mars was above ρ Leonis. Month III, night of the xth, first] part of the night,
 Mars was 4½ cubits below θ Leonis. Night of the 21st, first part of the night, Mars

- 8' [x GĪR *ár šá* A nn mm ŠU GE₆ x USAN AN] SIG DELE *šá* IGI ABSIN 1 KÛŠ IZI GE₆
4 USAN AN
- 9' [e SA₄ *šá* ABSIN nn mm] (blank)
-
- 10' [...] *in* 10 UŠ GE₆ *ana* ZÁLAG SIG 14 AN-KU₁₀ *sin šá* DIB
- 11' [...] AN-K[U₁₀] *šamáš*²¹ *šá* DIB *in* 1,24 GE₆ *ana* ZÁLAG
- 12' [...] GE₆ *ana* ZÁLAG ŠE DIR
-

Rev.ʹ

I and II broken;

III

- 1' [...] 'x x' [...]
- 2' [x] 1 *ina šamáš* GUB *a-pir*
-

IV

- 1' [...] NU 'PAP'
- 2' [...] 'DIR' NU PAP
- 3' [x x] GE₆ DIR NU PAP
- 4' 26 25,30 NU PAP
- 5' ZÍZ 30 18 DIR NU PAP
- 6' 12 7,30 ŠÚ DIR NU PAP
- 7' 13 16,30 ME *muš*
- 8' [13 x]+4³ *na muš*
- 9' [14 x G]E₆
- 10' [...] 'PAP'²¹

Comments

Obv. 3': the year for Mars phenomena is SE 0, which is the 6th year of Antigonos. It was also the 5th year of Alexander IV, which may have been written in the break.

5': Mars passed η Cancri probably on XII₂ 20.

- 8' [was β Virginis. Month IV, night of the xth, first part of the night, Mars was] 1
cubit below γ Virginis. Month V, night of the 4th, first part of the night, Mars
- 9' [was above α Virginis.]
-
- 10' [...] At 10° before sunrise. Month III, the 14th, lunar eclipse which was omitted.
- 11' [...] solar eclipse which was omitted. At 84° before sunrise.
- 12' [...] before sunrise. Month XII was intercalary.
-

Rev.ʹ

I and II broken;

III

- 1' [...] ... [...]
- 2' [...] while the sun stood there, earthshine.
-

IV

- 1' [...] I did not] watch.
- 2' [...] clouds, I did not watch.
- 3' [...] sunset to moonrise: [...] clouds, I did not watch.
- 4' The 26th, (moonrise to sunrise:) 25° 30'; I did not watch.
- 5' Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 18°; clouds, I did not watch.
- 6' The 12th, moonset to sunrise: 7° 30'; clouds, I did not watch.
- 7' The 13th, moonrise to sunset: 16° 30', measured.
- 8' [The 13th,] sunrise to moonset: [x]+4°, measured.
- 9' [The 14th,] sunset to moonrise: [...]
- 10' [...] watch[?].

No. 4

BM 34759 (= Sp II 251)

Copy: LBA 1366

Goal year: SE 79

Obv.'

1' [...] 'x x x' [...]

2' [...] 'x x x' [...]

3' [...] 'x x' [...]

Rev.'

I

1' [x] 'x x x ŠÚ' GE₆ 1[4 x ME]2' [1]4 4,30 na GE₆ 1'5' [x GE₆]3' MU-1-šū-1-KAM ¹An-ti-[u-uk-su LUGAL]4' GE₆ 13 7,20 ME [...]

5' Á KUR ki TAB-ú ina [...]

6' ÍR ana ZÁLAG-ru ki 'TAB' [...]

7' ana MAR iš-ta-ḥat [...]

8' 2½ KÙŠ e MAŠ-MAŠ šá S[IPA ...]

Comments

Rev. I 3'ff.: Lunar eclipse of -250 Dec 4, see Huber and De Meis p. 119.

No. 5

BM 32154 (= 76-11-17, 1881 + 81-6-25, 97) + 32408 (= 76-11-17, 2141)

Copy (by J. N. Strassmaier): OrNS 2 (1933) 113f.; AnOr 6 (1933) 4-7 (76-11-17, 1881)

Photo: Pl. 4f.

Listed as LBA 1216 + 1217

Bibliography: F. X. Kugler, OrNS 2 (1933) 100-105; J. Schaumberger, Analecta Orientalia 6 (1933) 4-7

Goal Year: SE 81

'Obv.

I

1' [MU-1,3-KA]M ¹An LUGAL'2' 'BAR' 13 AN-KU₁₀ sin 5 ITU

3' BAR DIB in 39 ME ana ŠÚ šamáš

4' 28 AN-KU₁₀ šamáš al 2-ta5' ŠU^{II} ḤAB-rat' GAR in 1,30 ME NIM6' DU₆ 15 AN-KU₁₀ sin7' 'BAR' DIB' in 20+'x GE₆ GIN

No. 4

Obv.'

1'-3' [...] [...]

Rev.'

1' [...] moonset to sunrise: Night of the 1[4th, moonrise to sunset: ...]

2' [The 1]4th, sunrise to moonset: 4,30. Night of the 15th, [sunset to moonrise: ...]

3' Year 61, [king] Anti[ochus]

4' Night of the 13th, moonrise to sunset: 7° 20' [...]

5' when it began on the east side, in [...]

6' maximal phase; when it began to clear [...]

7' threw (the shadow off) to the west [...]

8' 2½ cubits above γ Geminorum [it became eclipsed.]

No. 5

'Obv.

I

1' [Year 63,] king Antiochus.

2' Month I, the 13th, lunar eclipse (after) five months,

3' BAR, omitted; at 39° before sunset.

4' The 28th, solar eclipse; more than

5' two-thirds of the disk it made; at 90° after sunrise.

6' Month VII, the 15th, lunar eclipse,

7' BAR?, omitted?; at 20+x° after sunset.

- 8' 29 AN-KU₁₀ šamáš šá DIB
9' [i]na 1, 7 GE₆ GIN

II

- 1' '15' 2,50 G[E₆]
2' 15 5,30 n[a]
3' 28 11,50 KUR [....?]
4' ŠU 30 '15¹ a-kam N[U PAP]
5' 15 2,20 ME m[uš]
6' 15 3,10 ŠÚ NU PAP
7' 16 8,30 GE₆ a NU PAP
8' 16 11,40 na muš
9' 28 19 KUR

III

- 1' [x] 'x' [....]
2' [x x] KUR 'muš'
3' [....] 'x' ki PAP NU IGI
4' [x x M]E² muš
5' [x x Š]Ú²
6'-8' (broken)
9' [.... m]uš
10' [14 x]+10ŠÚ
11' '15' 1,30 ME
12' 15 8 na muš
13' 16 8,50 GE₆ DIR NU PAP
14' 28 10 UŠ[KUR²] muš
15' APIN 1 '10,40 DIR² [NU] 'PAP'
16' [1]3 15,20 ŠÚ muš
17' [1]4 11 ME muš
18' '14' 30 NINDA na muš
19' '15' 4² GE₆
20' 27 28² 19,50 KUR DIR NU PAP

IV

- 1' '14/15' 12² [....]
2' 15 8 [....]
3' 27 1'5'+[x]
4' AB 1 [....]
5' 12 10+[x ŠÚ]
6' [13] 4,20 ME 'DIR' m[uš]
7' '13' 7 na DIR muš
8' 14 1,20 GE₆ muš
9' 26 16 KUR muš

- 8' The 29th, solar eclipse which was omitted;
9' at 67° after sunset.

II

- 1' The 15th, sunset to moonrise: 2° 50' [....]
2' The 15th, sunrise to moonset: 5° 30' [....]
3' The 28th, moonrise to sunrise: 11° 50' [....]
4' Month IV, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 15°²; mist, I did not [watch.]
5' The 15th, moonrise to sunset: 2° 20', mea[sured.]
6' The 15th, moonset to sunrise: 3° 10'; I did not watch.
7' The 16th, sunset to moonrise: 8° 30'; mist, I did not watch.
8' The 16th, sunrise to moonset: 11° 40', measured.
9' The 28th, moonrise to sunrise: 19°.

III

- 1' [....] [....]
2' [....] moonrise to sunrise: [....], measured.
3' [....]; when I watched I did not see it.
4' [.... sunrise] to moonset²: [....], measured.
5' [.... moonset] to sunrise²: [....]
6'-8' (broken)
9' [...., mea]sured.
10' [The 14th,] moonset to sunrise: [x]+10'
11' The 15th, moonrise to sunset: 1° 30'.
12' The 15th, sunrise to moonset: 8°, measured.
13' The 16th, sunset to moonrise: 8° 50'; clouds, I did not watch.
14' The 28th, [moonrise to sunrise:] 10°, measured.
15' Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 10° 40'; clouds², [I did not] watch.
16' The 13th, moonset to sunrise: 15° 20', measured.
17' The 14th, moonrise to sunset: 11°, measured.
18' The 14th, sunrise to moonset: 30', measured.
19' The 15th, sunset to moonrise: 4°².
20' The 27th (or²) 28th², moonrise to sunrise: 19° 50'; clouds, I did not watch.

IV

- 1' The 14th/15th, [....] 12° [....]
2' The 15th, [....] 8° [....]
3' The 27th, [moonrise to sunrise:] 15+[x°]
4' Month X, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) [....]
5' The 12th, [moonset to sunrise:] 15+[x°]
6' [The 13th,] moonrise to sunset: 4° 20', mea[sured] (despite) clouds.
7' The 13th, sunrise to moonset: 7°; measured (despite) clouds.
8' The 14th, sunset to moonrise: 1° 20', measured.
9' The 26th, moonrise to sunrise: 16°, measured.

- 10' ZÍZ 30 13 DIR KALAG NU PAP
 11' 12 15³,40 ŠÚ DIR NU PAP
 12' 13 1,10 na DIR 'NU PAP'
 13' 14 4,40 ME DIR [....]
 14' 15 15,40 G[E₆]
 15' 27 12,10 DIR K[ALAG³]
 16' ŠE 1 22,40 DIR [....]
 17' 12 2,50 ŠÚ m[uš]
 18' 13 10 UŠ ME D[IR¹]
 19' 14 11,10 na DIR [....]
 20' 14 8,10 GE₆ D[IR]
 21' 26 16 KUR [....]
 22' BAR 30 15 D[IR]

The following is written across the whole width of the tablet.

- 23' [M]U-10-KAM 'šá¹ ší-i MU '4¹ 'Se LUGAL BAR 19 MÚL-BABBAR ina MÚL-MÚL
 IGI KUR 12 na-su in 17 IGI IZI in EN 20+[x]
 24' 'x¹ KÙŠ ina IGI šur GIGIR šá SI 1½ KÙŠ ana ULÙ SIG UŠ DU₆ 22 ana ME E-a 'x x'
 [....]
 25' 'MU-4¹-KAM ⁷An-ti-gu-nu-us ŠU GE₆ 18 ina ZÁLAG MÚL-BABBAR e 'is¹ le₁₀ 1 5/6
 KÙŠ [....]
 26' 'e is le₁₀¹ 2 KÙŠ ŠE GE₆ 24 USAN MÚL-BABBAR ana [NIM² ina²] 'LAL-šú² [....]

Rev.'

- 1 MU-1-šu-3 BAR in 11 dele-bat ina ŠÚ ina MÚL-MÚL IGI SIG 'GE₆' [....]
 2 e LUGAL 2/3 KÙŠ GE₆ 24 USAN dele-bat e MÚL TUR šá 4 KÙŠ á[r LUGAL]
 3 4 KÙŠ GE₆ 9 USAN dele-bat SIG GÌR ár šá A 4 SI GE₆ 20 USA[N]
 4 USAN dele-bat e SA₄ šá ABSIN 1½ KÙŠ IZI <GE₆> 21 USAN [dele-ba]t SIG RÍN šá
 'ULÙ¹ 10²+ [x SI]
 5 USAN dele-bat SIG RÍN šá SI 4½ KÙŠ KIN GE₆ 7 USAN dele-b[at x MÚL MURU]B₄
 šá SAG GÍR-TAB 1 SI T[E]
 6 e SI₄ 1 KÙŠ 4 SI GE₆ 24 USAN dele-bat SIG MÚL KUR šá [KIR₄ šil P]A 6 SI APIN
 GE₆ 3 USAN [....]
 7 GE₆ 22 USAN dele-bat e MÚL IGI šá SUHUR MÁŠ 1+[x SI GE₆ 2]7² USAN dele-bat e
 MÚL ár šá SU[HUR MÁŠ nn mm]
 8 AB 10 dele-bat ina ŠÚ ina GU ŠÚ [x dele-bat ina NI]M ina SAG GU IGI

- 10' Month XI, (the 1st of which was identical with) the 30th (of the preceding month,
 sunset to moonset:) 13°; dense clouds, I did not watch.
 11' The 12th, moonset to sunrise: 15°² 40'; clouds, I did not watch.
 12' The 13th, sunrise to moonset: 1° 10'; clouds, I did not watch.
 13' The 14th, moonrise to sunset: 4° 40'; clouds, [....]
 14' The 15th, sunset to [moonrise:] 15° 40' [....]
 15' The 27th, (moonrise to sunrise:) 12° 10'; dense² clouds, [....]
 16' Month XII, the 1st (of which followed the 30th of the preceding month, sunset to
 moonset:) 22° 40'; clouds, [....]
 17' The 12th, moonset to sunrise: 2° 50', mea[sured.]
 18' The 13th, moonrise to sunset: 10°; cl[ouds,]
 19' The 13th, sunrise to moonset: 11° 10'; clouds, [....]
 20' The 14th, sunset to moonrise: 8° 10'; cl[ouds,]
 21' The 26th, moonrise to sunrise: 16°, [....]
 22' Month I, (the 1st of which was identical with) the 30th (of the preceding month,
 sunset to moonset:) 15°; cl[ouds,]

The following is written across the whole width of the tablet.

- 23' Year 10 which is year 4¹, king Seleucus. Month I, the 19th, Jupiter's first appearance in
 Taurus; it was bright, rising of Jupiter to sunrise: 12°; (ideal) first appearance on the
 17th. Month V, around until the 20+[xth,]
 24' it became stationary cubits in front of β Tauri, 1½ cubits low to the south. Month
 VII, the 22nd, acronychal rising [....]
 25' Year 4 of Antigonos. Month IV, night of the 18th, last part of the night, Jupiter was 1
 5/6 cubit above α Tauri. [....]
 26' 2 cubits above α Tauri. Month XII, night of the 24th, first part of the night, Jupiter,
 [while] moving back to [the east, was]

Rev.'

- 1 Year 63. Month I, around the 11th, Venus' first appearance in the west in Taurus.
 Month III, night [....]
 2 2/3 cubit above α Leonis. Night of the 24th, first part of the night, Venus was [....]
 above ρ Leo[nis]
 3 4 cubits [....] Night of the 9th, first part of the night, Venus was 4 fingers below β
 Virginis. Night of the 20th, first part [of the night]
 4 first part of the night, Venus was 1½ cubits above α Virginis. Month V, <night> of the
 21st, first part of the night, [Ven]us was 10+[x fingers] below α Librae [....]
 5 first part of the night, Venus was 4½ cubits below β Librae. Month VI, night of the
 7th, first part of the night, Venus was 1 finger [....] δ Scorp[is], it came close [.... Venus
 was]
 6 1 cubit 4 fingers above α Scorp[is]. Night of the 24th, first part of the night, Venus was
 6 fingers below θ Ophiuchi. Month VIII, night of the 3rd, first part of the night, [....]
 7 Night of the 22nd, first part of the night, Venus was 1+[x fingers] above γ Capricorni.
 [Night of the 2]7th², first part of the night, Venus was [....] above δ Capricorni.
 8 Month X, the 10th, Venus' last appearance in the west in Aquarius. [The xth, Venus']
 first appearance in the east in the beginning of Aquarius.

- 9 MU-35 BAR in 22 GU₄-UD ina ŠÚ ina SAG MAŠ-MA[Š IGI GE₆] 7 USAN GU₄-UD e MÚL IGI šá še-pít M[AS-MAŠ nn mm]
- 10 GU₄-UD 4 SI ana NIM DIB GE₆ 27 USAN GU₄-UD e MÚL [ár šá še-p]it MAŠ-MAŠ 1½ KÙŠ GU₄ GE₆ 6 USAN GU₄-U[D]
- 11 SIG MAŠ-MAŠ IGI 3½ KÙŠ GE₆ 10 USAN GU₄-UD SIG M[AS-MAŠ ár] 2½ KÙŠ SIG 3 GU₄-UD ina ŠÚ <ina> ALLA ŠÚ in 20+[x]
- 12 [....] 'ŠU' 21 GU₄-UD ina NIM ina ALL[A ŠÚ KIN] 12 ina ŠÚ IGI DIB 26 GU₄-UD ina ŠÚ ŠÚ-šú DIB 'DU₆' in '17'¹
- 13 [GU₄-UD ina NIM ina x IGI GE₆ x]+1 ina ZÁLAG GU₄-UD [e R]ÍN šá ULÙ 14 SI GE₆ 27 ina ZÁLAG GU₄-UD SIG RÍN šá SI '2' KÙŠ'
- 14 [....] šá SAG G[IR-TAB 1] SI [T]E GE₆ 10 ina ZÁLAG GU₄-UD e SI₄ 2 2/3 KÙŠ
- 15 [.... x]+4 ina ŠÚ [ina G]U IGI 23 GU₄-UD ina ŠÚ ina GU ŠÚ ZÍZ in 11 ina NIM ina GU IGI
- 16 [....]
- 17 [....] 'TA' 21 ki PAP NU IGI KIN 2 ina A IGI 19 na in 1 IGI 'DU₆ GE₆ 1 ina ZÁLAG GENNA'
- 18 [.... k]i 'UŠ'-ú 1½ KÙŠ ár GÌR ár šá SAG 'A UŠ'
- 19 [.... SI]G' GÌR ár šá A 2/3 KÙŠ
- 20 [....] 18' AN ina TIL GÌR-TAB ŠÚ
- 21 [.... x]+'10 USAN' AN e MÚL TUR
- 22 [....] '2' KÙŠ GE₆ 19 US[AN AN e] 'GÌR' ár šá A 'x'
- 23 [....] IZI GE₆ 6 USAN AN e S[A₄ šá ABSIN]
- 24 [nn mmU]SAN AN SIG RÍN šá SI 4½ KÙŠ 10+[x]
- 25 [....] AN e SI₄ 2 KÙŠ
- 26 [....] 'a'-na MU-1,21-KAM 'S[e LUGAL]

Comments

I 2'f.: Lunar eclipse of -248 Apr 19.

4'f.: Solar eclipse of -248 May 4.

6'f.: Lunar eclipse of -248 Oct 13.

8'f.: Solar eclipse of -248 Oct 27.

III 20': 27 is written in smaller signs in front of 28.

IV 19': day number 14 error for 13.

23': 'šá' šá-i MU '4' is written in smaller script above the line. Of the year number 4, only two vertical wedges are preserved.

25': The correct reading of the year number 4 of Antigonos was already established by T. Boiy, JAOS 121 (2001) 648f.

Rev. 1: the year number should be 73 instead of 63.

- 9 Year 35. Month I, around the 22nd, Mercury's [first appearance] in the west in the beginning of Gemini. [Night] of the 7th, first part of the night, Mercury was [....] above η Geminorum.
- 10 Mercury having passed 4 fingers to the east. Night of the 27th, first part of the night, Mercury was 1½ cubits above μ Geminorum. Month II, night of the 6th, first part of the night, Mercury
- 11 was 3½ cubits below α Geminorum. Night of the 10th, first part of the night, Mercury was 2½ cubits below [β Gem]inorum. Month III, the 3rd, Mercury's last appearance in the west <in> Cancer. Around the 20+[xth,]
- 12 [....] Month IV, the 21st, Mercury's [last appearance] in the east in Cancer. [Month VI,] the 12th, first appearance in the west, omitted. The 26th, Mercury's last appearance in the west, omitted. Month VII, around the 17th¹.
- 13 [Mercury's first appearance in the east in Night of the x]+1st, last part of the night, Mercury was 14 fingers [above] α Librae. Night of the 27th, last part of the night, Mercury was 2' cubits below β Librae.
- 14 [.... Mercury was 1] finger [....] Scorpii, it came close. Night of the 10th, last part of the night, Mercury was 2 2/3 cubits above α Scorpii.
- 15 [.... The x]+4th, first appearance in the west [in Aqua]rius. <Month X>, the 23rd, Mercury's last appearance in the west in Aquarius. Month XI, around the 11th, first appearance in the east in Aquarius.
- 16 [....]
- 17 [....] from the 21st, when I watched, I did not see it. Month VI, the 2nd, first appearance in Leo; rising of Saturn to sunrise: 19°; (ideal) first appearance on the 1st. Month VII, night of the 1st, last part of the night, Saturn was
- 18 [....] when it became stationary [to the east], it became stationary 1½ cubits behind β Virginis.
- 19 [....] 2/3 cubit below' β Virginis.
- 20 [....] the 18th¹, Mars' last appearance in the end of Scorpius.
- 21 [.... night of the x]+10th, first part of the night, Mars was [....] q Leonis.
- 22 [....] 2 cubits. Night of the 19th, first part of the night, [Mars was] [....] β Virginis.
- 23 [....] Month V, night of the 6th, first part of the night, Mars was [....] above [α Virginis]
- 24 [...., fi]rst part of the night, Mars was 4½ cubits below β Librae. The 10+[xth,]
- 25 [....] Mars was 2 cubits above α Scorpii.
- 26 [....] for year 81, [king] Se[leucus]

BM 32286 (= 76-11-17, 2014)

Copy: OrNS 2 (1933) 114

Photo: Pl. 4f.

Listed as LBAT *1218

Bibliography: F.X. Kugler, OrNS 2 (1933) 105-115; J. Schaumberger, *Analecta Orientalia* 6 (1933) 7f.

Goal year: SE 90

Upper edge

2 'ina a-mat^dEN¹ u^dGAŠAN-ia liš-lim

Obv.¹

1 MU-19-KAM ¹Se-lu-ku LUGAL^{itu}GU₄ EN 16 MÚL-[BABBAR]
2 UŠ^{itu}ŠU 16 MÚL-BABBAR ana ME E-a^{itu}KIN EN [...]
3 ^{itu}AB 26 MÚL-BABBAR ina TIL GU ŠÚ^{itu}ŠE 2 M[ÚL-BABBAR]

4 MU-1-KAM ¹Se-lu-ku šá IGI-ta MU-7^{itu}I[ZI¹]
5 GE₆ 23 USAN MÚL-BABBAR ana ŠÚ ina 'LAL-šú x¹ [...]
6 'e¹ MÚL IGI šá SUHUR MÁŠ [...]

7 [MU-1,2]2-'KAM¹ I[....]

'Rev.

I

1' ^{itu}DU₆ GE₆ 28 'x x x¹
2' AN-KU₁₀ šamaš šá DIB
3' ^{itu}APIN GE₆ 14 in 3 UŠ
4' ana KUR šamaš Á KUR ki-i
5' TAB-ú ád ŠÚ 'ŠE¹ DIR

II

1' I[ZI]
2' I[4 x ŠÚ]
3' '15¹ [x ME]
4' 15 [x na]
5' 16 [x GE₆]
6' 27 10+[x]

Upper Edge

1 U₄-1-KAM IGI-DUḪ-A^{meš} DIB-qa^{meš} u AN-KU₁₀[^{meš}]

Comments

Rev. I 1': Solar eclipse of -239 Oct 18. Huber and De Meis (p. 159) note that one would expect a time after sunset in the damaged part of the line; they tentatively read it 1¹,40¹ me n[im¹]. I cannot find a suitable reading for the traces.

I 3'-5': lunar eclipse of -239 Nov 3.

Upper edge

2 At the command of Bel and Beltija may it go well.

Obv.¹

1 Year 19, king Seleucus. Month II, until the 16th, Jupi[ter]
2 became stationary. Month IV, the 16th, Jupiter's acronychal rising. Month VI, until [...]
3 Month X, the 26th, Jupiter's last appearance in the end of Aquarius. Month XII, the 2nd, J[upiter's first appearance]

4 Year 1, Seleucus, which before (was) year 7. Month V¹, [...]
5 Night of the 23rd, first part of the night, Jupiter, while moving back to the west, was [...]
6 [...] above γ Capricorni.

7 [Year 8]2, [...]

'Rev.

I

1' Month VII, night of the 28th,
2' solar eclipse which was omitted.
3' Month VIII, night of the 14th, at 3°
4' before sunrise, when it began on the east side,
5' it set eclipsed. Month XII was intercalary.

II

1' Month V, [...]
2' The 1[4th, moonset to sunrise:]
3' The 15th, [moonrise to sunset:]
4' The 15th, [sunrise to moonset:]
5' The 16th, [sunset to moonrise:]
6' The 27th, (moonrise to sunrise:) 10+[x°]

Upper edge

1 First days, appearances, passings and eclipses [...]

No. 7

BM 34625 (= Sp II 106+112 + Sp III 328 + 82-7-4,181) + 34741 (= Sp II 232)
+ 55543 (82-7-4,126)

Copies: LBA 1219 (34741), 1220 (34625); 55543 listed as LBA *1221

Photo: Pl. 6f.

Bibliography: F. X. Kugler - J. Schaumberger, *Analecta Orientalia* 6 (1933) 3-12; OrNS 2 (1933) 97-116;
L. Brack-Bernsen, *SEAC* 5th (1999) 31

Goal year: SE 91

Upper edge

1 [...] 'x x x x x' [...]

Obv.

1 [MU-20-KAM MÚL-BABBAR *ana* NIM *ki* U]Š-ú *ina* zib^{me} UŠ NU PAP KIN 5
MÚL-BABBAR *ana* ME E-[a]

2 [...] 'x' DIR 21 MÚL-BABBAR *ina* HUN IGI 13 *na* *ina* 1'9¹ [IGI]

3 MU-2' [...] DI]B-qa šá MÚL-BABBAR *ina* GU *u* zib^{me} *ia*-a¹-[nu]

4 MU-1,23-KAM ¹Se¹ [LUGAL *dele-bat* SIG šur] SI 1½ KÜŠ GE₆ 16 *dele-bat e* šur
ULÜ 2 KÜŠ G[E₆ x *dele-bat*]

5 e MÚL IGI šá še-pít MAŠ-MAŠ [nn mm GE₆ x (USAN) *dele-bat e* MÚL *ár* šá š]e-pít
MAŠ-MAŠ 1 KÜŠ 4 SI *i* *dele-bat ana* NIM DIB GE₆ 28 *dele-bat* 'e' [...]

6 GU₄ GE₆ 8 USAN *dele-bat* SIG MAŠ-[MAŠ IGI nn KÜŠ GE₆ x (USAN) *dele-bat* SIG]
MAŠ-MAŠ *ár* 2½ KÜŠ GE₆ 26 USAN *dele-bat e* MÚL *ár* šá ALLA šá UL[Ü nn mm]

7 SIG GE₆ 7 USAN *dele-bat* SIG SAG A [nn mm] *dele-bat ana* NIM DIB GE₆ 23 *dele-*
bat e MÚL TUR ½ KÜŠ *i* *dele-b[at ana x x]*

8 ŠU GE₆ 8 *dele-bat* SIG GIŠ.KUN 4 KÜŠ 'GE₆ x' [*dele-bat*] x 1' U¹ *ana* EGIR'-šú
LAL IZI 11 8 *na* šá *dele-bat* KUR *ina* 13 *dele-bat*

9 *ina* ŠÚ *ina* A ŠÚ KIN 3 *dele-bat ana* NIM *ina* A IGI KUR N[IM-a *ina* x IG]I DU₆ GE₆
19 *ina* ZÁLAG *dele-bat* SIG GİR *ár* ½ KÜŠ *i* *dele-bat ana* NIM DIB APIN GE₆ 5 *ina*
ZÁ[LAG *dele-bat*]

10 SIG DELE 20 SI *i* *dele-bat ana* NIM DIB GE₆ 18 *dele-bat* 'e SA₄' 1½ KÜŠ GAN GE₆ 7
dele-bat e RÍN šá ULÜ ½ KÜŠ LÁL GE₆ 12 *dele-bat* SIG RÍN šá SI 2 'x' [KÜŠ GE₆ x
ina ZÁLAG *dele-bat e* MÚL *e* šá SAG GİR-TAB 10 SI [*dele-bat* nn mm] *ana* NIM DIB

11 GE₆ 29 *dele-bat e* SI₄ 3 KÜŠ AB GE₆ 10 *dele-bat* [e šil] PA 1 KÜŠ 8 SI *dele-bat* 2' SI *ana*
NIM DIB ZÍZ GE₆ 15 *ina* ZÁLAG *dele-bat* SIG SI MÁŠ 1 2/3 KÜŠ

12 GE₆ 28 *dele-bat e* SUHUR IGI 1 KÜŠ '4' [S]I 'ŠE GE₆' 1 *dele-bat e* SUHUR *ár* 1 KÜŠ
4 SI LÁL DIR 28 10 UŠ *na* šá *dele-bat*

13 MU-1,24 BAR *ina* 4 *dele-bat ana* 'NIM' *ina* HUN ŠÚ

No. 7

Upper edge

1 [...] [...]

Obv.

1 [Year 20, when Jupiter] became stationary [to the east,] it became stationary in
Pisces; I did not watch. Month VI, the 5th, Jupiter's acronychal rising [...]

2 [...] Month XII₂, the 21st, Jupiter's first appearance in Aries; rising of Jupiter to
sunrise: 13°; [(ideal) first appearance] on the 19th¹.

3 Year 2 [...] the passings of Jupiter in Aquarius and Pisces are missing.

4 Year 83, [king] Seleucus. [...] Venus was] 1½ cubits [below β] Tauri. Night of the 16th,
Venus was 2 cubits above ζ Tauri. Night of the xth, Venus was]

5 [...] above η Geminorum. [Night of the xth, [first part of the night,] Venus was] 1
cubit 4 fingers [above μ] Geminorum, Venus having passed a little to the east. Night of
the 28th, Venus was [...] above [...]

6 Month II, night of the 8th, first part of the night, Venus was [nn cubits] below α
[Geminorum. Night of the xth, (first part of the night,) Venus was] 2½ cubits [below]
β Geminorum. Night of the 26th, first part of the night, Venus was [...] above δ
Cancer.

7 Month III, night of the 7th, first part of the night, Venus was [...] below ε Leonis. [...] Venus
having passed [...] to the east. Night of the 23rd, Venus was ½ cubit above ρ
Leonis, Venus [...] a little [...]

8 Month IV, night of the 8th, Venus was 4 cubits below θ Leonis. Night of the xth,
[Venus was] being back behind¹ it. Month V, the 11th, sunset to setting of Venus:
8°; it was bright. On the 13th, Venus'

9 last appearance in the west in Leo. Month VI, the 3rd, Venus' first appearance in the east
in Leo; it was bright (and) hi[gh, (ideal) first appearance on the xth.] Month VII, night of
the 19th, last part of the night, Venus was ½ cubit below β Virginis, Venus having passed
a little to the east. Month VIII, night of the 5th, last part [of the night, Venus was]

10 20 fingers below γ Virginis, Venus having passed a little to the east. Night of the 18th,
Venus was 1½ cubits above α Virginis. Month IX, night of the 7th, Venus was ½ cubit
above α Librae; it was balanced. Night of the 12th, Venus was 2+x [cubits] below β
Librae. [Night of the xth, last] part of the night, Venus was 10 fingers above β Scorpis,
[Venus] having passed [...] to the east.

11 Night of the 29th, Venus was 3 cubits above α Scorpis. Month X, night of the 10th,
Venus was 1 cubit 8 fingers [above θ] Ophiuchi, Venus having passed 2' fingers to the
east. Month XI, night of the 15th, last part of the night, Venus was 1 2/3 cubits below
β Capricorni.

12 Night of the 28th, Venus was 1 cubit 4 fingers above γ Capricorni. Month XII, night of
the 1st, Venus was 1 cubit 4 fingers above δ Capricorni; it was balanced. Month XII₂,
the 28th, rising of Venus to sunrise: 10°.

13 Year 84. Month I, around the 4th, Venus' last appearance in the east in Aries.

- 14 MU-45-KAM ¹An u ¹Se LUGAL^{meš} BAR 21 ŠÚ šá GU₄-UD ina ŠÚ TA 17 ki PAP NU IGI
ina 18 KI 19 GU₄-UD ina ŠÚ ina MÚL-MÚL ŠÚ
- 15 SIG 3 ina NIM IGI DIB 'T'3 ina NIM ŠÚ-šú DIB ŠU 9 ina ŠÚ ina ALLA IGI 15 na
ina 7 IGI IZI 20 ina ŠÚ ina SAG ABSIN ŠÚ NU PAP
- 16 KIN 14 ina NIM ina TIL A IGI TUR 17 na ina 11 IGI D[U₆] 6 ina NIM ina ABSIN
ŠÚ APIN 29 ina ŠÚ ina PA IGI GAN 14 ina ŠÚ ina PA ŠÚ
- 17 ina 26 ina NIM ina PA IGI ZÍZ 10 ina NIM ina MÁŠ ŠÚ Š[E x] ina ŠÚ ina zib^{me} IGI
GE₆ 23 USAN GU₄-UD SIG MÚL IGI
- 18 šá SAG LU '3' KÜŠ GE₆ '25' USAN GU₄-UD SIG MÚL ár [šá SAG LU x]+1 [K]ÜŠ
DIR ina 10 GU₄-UD ina ŠÚ ina LU ŠÚ ŠE DIR
-
- 19 [MU]-'30'+[2-KAM] 'x x x x x' [... i]n' 28 KI 29 GENNA ana ME E ŠU EN 29
20 [GENNA ana ŠÚ ki UŠ-a ina] PA UŠ A[PIN GENNA ina] PA ŠÚ GAN 19 GENNA
ina PA IGI 15 na
-
- 21 [MU-12-KAM ¹Se] LUGAL IZI 'EN x AN ana' NIM ki UŠ-ú 1½ KÜŠ ina IGI MÚL-
M[ÚL U]Š 'DU₆' 13'+[x]
- 22 [... x]+8' AN ana ŠÚ ki UŠ-a 4 KÜŠ SIG MÚL IGI šá SAG HUN ½ KÜŠ ana NIM
DIB UŠ [']
-
- 23 [MU-44-KAM ¹An u ¹Se] LUGAL^{meš} SIG GE₆ 11 ina ZÁLAG AN SIG nu-nu 3 KÜŠ
GE₆ 21 ina ZÁLAG AN SIG MÚL IGI šá SAG HUN 4 'KÜŠ'
- 24 [GE₆ x ina ZÁLAG AN SIG MÚL ár šá S]AG HUN 5 [KÜŠ IZ]I GE₆ 5 ina ZÁLAG AN
SIG MÚL-[MÚL nn mm] 'DU₆' GE₆ 21
- 25 [ina ZÁLAG AN ana ŠÚ ina LAL-šú SIG MÚL]-MÚL 1 5/6 K[ÜŠ AB] GE₆ 9 USAN
AN ana NIM ina [LAL-šú SIG] MÚL-MÚL 1 KÜŠ
- 26 [... e is l]e₁₀' '3' [KÜŠ' ŠE GE₆ x]+1 USAN AN SIG šur GIGIR šá SI 'T' KÜŠ 8 SI
- 27 [...] GE₆ 24 USAN AN e MÚL IGI šá še-pít MAŠ-MAŠ
- 28 [... M]U-45 BAR GE₆ 3 USAN AN e MAŠ-MAŠ šá SIPA '4' KÜŠ'

Rev.

I broken:

- 14 Year 45. kings Antiochus and Seleucus. Month I, the 21st, Mercury's last appearance in
the west, from the 17th when I watched I did not see it. On the 18th or 19th, Mercury's
last appearance in the west in Taurus.
- 15 Month III, the 3rd, first appearance in the east, omitted. The 13th, its last appearance
in the east, omitted. Month IV, the 9th, first appearance in the west in Cancer; sunset
to setting of Mercury: 15°; (ideal) first appearance on the 7th. Month V, the 20th, last
appearance in the west in the beginning of Virgo; I did not watch.
- 16 Month VI, the 14th, first appearance in the east in the end of Leo; it was small, rising
of Mercury to sunrise: 17°; (ideal) first appearance on the 11th. Month VII, the 6th,
last appearance in the east in Virgo. Month VIII, the 29th, first appearance in the west
in Sagittarius. Month IX, the 14th, last appearance in the west in Sagittarius.
- 17 Around the 26th, first appearance in the east in Sagittarius. Month XI, the 10th, last
appearance in the east in Capricorn. Month XII, [the xth,] first appearance in the west
in Pisces. Night of the 23rd, first part of the night, Mercury was 3² cubits below β
- 18 Arietis. Night of the 25th, first part of the night, Mercury was [x]+1 cubits below α
[Arietis. Month XII₂, around the 10th, Mercury's last appearance in the west in Aries.
Month XII was intercalary.
-
- 19 [Year] 3[2,] [.... ar]ound' the 28th or 29th, Saturn's acronychal rising. Month IV,
until the 29th.
- 20 [when Saturn became stationary to the west,] it became stationary in Sagittarius.
Mon[th VIII, Saturn's] last appearance in Sagittarius. Month IX, the 19th, Saturn's
first appearance in Sagittarius; rising of Saturn to sunrise: 15°.
-
- 21 [Year 12,] king [Seleucus.] Month V, until the xth, when Mars became stationary to the
east, it became stationary 1½ cubits in front of η Tauri. Month VII², the 13+[x]th¹,
- 22 [... the x]+8th, when Mars became stationary to the west, it became stationary 4
cubits below β Arietis, having passed ½ cubit to the east.
-
- 23 [Year 44,] kings [Antiochus and Seleucus.] Month III, night of the 11th, last part of
the night, Mars was 3 cubits below η Piscium. Night of the 21st, last part of the night,
Mars was 4 cubits below β Arietis.
- 24 [Night of the xth, last part of the night, Mars was] 5 [cubits below α] Arietis. [Mon]th
V, night of the 5th, last part of the night, Mars was [...] below η Tauri. Month VII,
night of the 21st.
- 25 [last part of the night, Mars, while moving back to the west, was] 1 5/6 cubits [below η]
Tauri. [Month X,] night of the 9th, first part of the night, Mars, while [moving back]
to the east, was 1 cubit [below] η Tauri.
- 26 [...] 3 [cubits² [above α Taur]i. [Month XII, night of the x]+1st, first part of the
night, Mars was 1 cubit 8 fingers below β Tauri.
- 27 [...] Night of the 24th, first part of the night, Mars was [...] above η Geminorum.
- 28 [...] Year 45. Month I, night of the 3rd, first part of the night, Mars was 4² cubits
above γ Geminorum.

Rev.

I broken:

II

- 1' [x x]+10ME DIR NU PAP
 2' [x x]+10ŠÚ DIR NU PAP
 3' [x x],20 GE₆
 4' [x x],20 *na muš*
 5' [x] 17,10
 6' [GU₄] 1 24 DIR *muš*
 7' [12] 3 ŠÚ DIR NU PAP
 8' [1]¹3¹ 5 ME DIR *muš*
 9' 13 4,50 *na* DIR NU PAP
 10' 14 7,10 GE₆ DIR NU PAP
 11' 28 20
 12' SIG 30 18 DIR *muš*
 13' 12 9 ŠÚ
 14' 13 13,20 ME NU PAP
 15' ¹13¹ 1,30 *na*
 16' [14] [x]+20 NINDA GE₆
 17' [x x],50 *muš*
 18' [ŠU x] NU IGI

III

- 1 [KIN] ¹x¹
 2 13 12,10 ŠÚ
 3 14 20 NINDA *na muš*
 4 15 3 ME *muš*
 5 16 6 GE₆
 6 27 18,30
 7 DU₆ 1 16,30 *muš* KUR₄ *ina* GUB IGI
 8 [1]¹3¹ 9,10 ŠÚ
 9 14 6,40 ME *muš*
 10 14 ¹x¹ [*na* ?]
 11 15 1+[x GE₆]
 12 27 [x]+11¹
 13 APIN 30 13,30 KUR₄ *muš*
 14 14 5 ŠÚ DIR *muš*
 15 15 1 ME *muš*
 16 15 8,30 *na muš*
 17 16 8,20 GE₆
 18 27 18 DIR *muš*
 19 GAN 1 22 KUR₄ NU PAP
 20 [x] 6,30 ME *muš*
 21 [x x] NINDA ŠÚ DIR NU PAP
 22 [x x] ¹x¹ GE₆ DIR NU PAP

II

- 1' [x] moonrise to sunset: [x]+10'; clouds, I did not watch.
 2' [x] moonset to sunrise: [x]+10'; clouds, I did not watch.
 3' [x] sunset to moonrise: [x°] 20'.
 4' [x] sunrise to moonset: [x°] 20'; measured.
 5' [x] (moonrise to sunrise:) 17° 10'.
 6' [Month II,] the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 24°; measured (despite) clouds.
 7' [The 12th,] moonset to sunrise: 3°; clouds, I did not watch.
 8' [The 1]3th, moonrise to sunset: 5°; measured (despite) clouds.
 9' The 13th, sunrise to moonset: 4° 50'; clouds, I did not watch.
 10' The 14th, sunset to moonrise: 7° 10'; clouds, I did not watch.
 11' The 28th, (moonrise to sunrise:) 20°.
 12' Month III, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 18°; measured (despite) clouds.
 13' The 12th, moonset to sunrise: 9°.
 14' The 13th, moonrise to sunset: 13° 20'; I did not watch.
 15' The 13th, sunrise to moonset: 1° 30'.
 16' [The 14th,] sunset to moonrise: [x]+20'.
 17' [the xth,] (moonrise to sunrise:) x°] 50'; measured.
 18' [Month IV,] I did not see (the moon).

III

- 1 [Month VI,]
 2 The 13th, moonset to sunrise: 12° 10'.
 3 The 14th, sunrise to moonset: 20'; measured.
 4 The 15th, moonrise to sunset: 3°; measured.
 5 The 16th, sunset to moonrise: 6°.
 6 The 27th, (moonrise to sunrise:) 18° 30'.
 7 Month VII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 16° 30'; measured, it was bright; it could be seen while (the sun) stood there.
 8 [The 1]3th, moonset to sunrise: 9° 10'.
 9 The 14th, moonrise to sunset: 6° 40'; measured.
 10 The 14th, [sunrise to moonset:] [....]
 11 The 15th, [sunset to moonrise:] 1+[x°]
 12 The 27th, (moonrise to sunrise:) [x]+11°.
 13 Month VIII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 30'; it was bright, measured.
 14 The 14th, moonset to sunrise: 5°; measured (despite) clouds.
 15 The 15th, moonrise to sunset: 1°; measured.
 16 The 15th, sunrise to moonset: 8° 30'; measured.
 17 The 16th, sunset to moonrise: 8° 20'.
 18 The 27th, (moonrise to sunrise:) 18°; measured (despite) clouds.
 19 Month IX, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 22°; it was bright; I did not watch.
 20 [The xth,] moonrise to sunset: 6° 30'; measured.
 21 [The xth,] moonset to sunrise: [x']; clouds, I did not watch.
 22 [The xth,] sunset to moonrise: [x]; clouds, I did not watch.

23 [x x n]a muš
24 [x x x] NU PAP

IV

1 AB 30 17 DIR NU [PAP]
2 14 9 ŠÚ
3 15 30 NINDA ME muš
4 15 4 na muš
5 16 14,50 GE₆ DIR NU PAP
6 28 12,50 DIR NU PAP
7 ZÍZ 1 19,50 DIR NU [PAP]
8 14 6+[x ME]
9 [14 x ŠÚ]
10 [15 x GE₆]
11 15 10+[x na]
12 27 '19 DIR' NU PAP
13 ŠE 1 21,50 DIR KALAG NU PAP
14 13 5,50 ŠÚ
15 14 40 NINDA ME muš
16 14 5 na muš
17 15 14 GE₆
18 27 13
19 DIR 30 13 SIG muš
20 13 9,40 ŠÚ [DIR] NU PAP
21 14 8 M[E ?]
22 14 2,30 [na ?]
23 15 6+[x GE₆ ?]
24 27? [....]

Left edge

1 [....] 'šá' ana' MU'-1,31-KAM 'An-ti-i-ku-us LUG[AL] k[un-nu-u]

Comments

Obv. 1f.: Parallel in LBAT 1402.

2: Month XII₂ is written only DIR in this text in obv. 12 and 18.

3: Year 2 is the second year of Seleucus; it is equivalent to year 8 of the Seleucid era. A date to the 4th year of Seleucus (= SE 10) is found in Diaries No. -302/301 rev. 21.

8: the next passing should be by β Virginis.

19: I cannot read the traces in the first part of the line, but in year 32 Antiochus and Seleucus were kings; their names would more or less fill the space available.

23 [The xth,] sunrise to moonset: [....]; measured.
24 [The xth, (moonrise to sunrise:)] I did not watch.

IV

1 Month X. (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 17°; clouds, I did not [watch.]
2 The 14th, moonset to sunrise: 9°.
3 The 15th, moonrise to sunset: 30'; measured.
4 The 15th, sunrise to moonset: 4°; measured.
5 The 16th, sunset to moonrise: 14° 50'; clouds, I did not watch.
6 The 28th, (moonrise to sunrise:) 12° 50'; clouds, I did not watch.
7 Month XI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 19° 50'; clouds, I did not [watch.]
8 The 14th, [moonrise to sunset:] 6+[x°]
9 [The 14th, moonset to sunrise:]
10 [The 15th, sunset to moonrise:]
11 The 15th, [sunrise to moonset:] 10+[x°]
12 The 27th, (moonrise to sunrise:) 19°; clouds, I did not watch.
13 Month XII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 21° 50'; dense clouds, I did not watch.
14 The 13th, moonset to sunrise: 5° 50'.
15 The 14th, moonrise to sunset: 40'; measured.
16 The 14th, sunrise to moonset: 5°; measured.
17 The 15th, sunset to moonrise: 14°.
18 The 27th, (moonrise to sunrise:) 13°.
19 Month XII₂, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13°; it was faint, measured.
20 The 13th, moonset to sunrise: 9° 40'; [clouds,] I did not watch.
21 The 14th, moonrise to sunset: 8° [....]
22 The 14th, [sunrise to moonset:] 2° 30' [....]
23 The 15th, [sunset to moonrise:] 6+[x°]
24 The 27th', [....]

Left edge

1 [....] which are est[ablished] for year 91, king Antiochus.

BM 55519 (= 82-7-4, 99)

Photo: Pl. 8

Listed as LBAT *1222

Goal year: SE 94

Upper edge

1 [ina a-mat^dEN u] ^dGASAN-ia liš-lim

'Obv.'

I

1 [MU-1,]15-KAM ¹Se LUGAL
 2 [DU₆] 12,20 ŠÚ u na
 3 9,10 ME u GE₆
 4 APIN 13 ŠÚ u na
 5 9 ME u GE₆
 6 GAN 14,10 ŠÚ u na
 7 9[?] ME u GE₆
 8 AB 14,10 ŠÚ u na
 9 15,50 ME u GE₆
 10 ZIZ 12 ŠÚ u na
 11 14,20 ME u GE₆
 12 ŠE 10,20 ŠÚ u na
 13 14,50 ME u GE₆

14 [M]U-1,16-KAM ¹Se LUGAL
 15 [BAR x] 13,20 DIR NU PAP
 16 [....] 'x' ME
 17 [....] 'ŠÚ'

II

1 ŠU 30 12 a ma-diš SIG
 2 13 2,30 ŠÚ
 3 14 3,20 ME muš
 4 14 10,30 na muš
 5 15[?] 14,50 GE₆ NU PAP
 6 27 13,20
 7 IZI 1 15,30
 8 12 9,10 ŠÚ
 9 13 7,30 ME muš
 10 13 5 na muš (erased?)
 11 14 5 GE₆
 12 27 14,30
 13 KIN 30 8,10 ki PAP NU IGI
 14 13 11,30 ME NU PAP
 15 13 2,20 ŠÚ

Upper edge

1 [At the command of Bel and] Beltija may it go well.

Obv.'

I

1 [Year 7]5, king Seleucus.
 2 [Month VII,] 'moonset to sunrise' plus 'sunrise to moonset': 12° 20'.
 3 'moonrise to sunset' plus 'sunset to moonrise': 9° 10'.
 4 Month VIII, 'moonset to sunrise' plus 'sunrise to moonset': 13°.
 5 'moonrise to sunset' plus 'sunset to moonrise': 9°.
 6 Month IX, 'moonset to sunrise' plus 'sunrise to moonset': 14° 10'.
 7 'moonrise to sunset' plus 'sunset to moonrise': 9°[?].
 8 Month X, 'moonset to sunrise' plus 'sunrise to moonset': 14° 10'.
 9 'moonrise to sunset' plus 'sunset to moonrise': 15° 50'.
 10 Month XI, 'moonset to sunrise' plus 'sunrise to moonset': 12°.
 11 'moonrise to sunset' plus 'sunset to moonrise': 14° 20'.
 12 Month XII, 'moonset to sunrise' plus 'sunrise to moonset': 10° 20'.
 13 'moonrise to sunset' plus 'sunset to moonrise': 14° 50'.

14 [Y]ear 76, king Seleucus.

15 [Month I, (sunset to moonset:)] 13° 20'; clouds, I did not watch.

16 [....] moonrise to sunset:

17 [....] moonset to sunrise: [....]

II

1 Month IV, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset: 12°; mist, it was very faint.
 2 The 13th, moonset to sunrise: 2° 30'.
 3 The 14th, moonrise to sunset: 3° 20'; measured.
 4 The 14th, sunrise to moonset: 10° 30'; measured.
 5 The 15th, sunset to moonrise: 14° 50'; I did not watch.
 6 The 27th, (moonrise to sunrise:) 13° 20'.
 7 Month V, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 15° 30'.
 8 The 12th, moonset to sunrise: 9° 10'.
 9 The 13th, moonrise to sunset: 7° 30'; measured.
 10 The 13th, sunrise to moonset: 5°; measured[?].
 11 The 14th, sunset to moonrise: 5°.
 12 The 27th, (moonrise to sunrise:) 14° 30'.
 13 Month VI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 8° 10'; when I watched I did not see it.
 14 The 13th, moonrise to sunset: 11° 30'; I did not watch.
 15 The 13th, moonset to sunrise: 2° 20'.

16 14 1,50 GE₆
 17 '14' '14'¹ 30²¹ na muš

III

1 15 [....]
 2 27 'x'
 3 GAN 1 'x' [....]
 4 10+[x]
 5 10+[x] 'x' [....]
 6 15' 'x' [....]
 7 15' [....]
 8 20+[x] 'x'
 9 'AB' [....]
 10 10+[x]
 11 10+[x]
 12 15' [....]
 13 16 7 [....]
 14 28 11+[x]
 15 ZÍZ 1 22 [....]
 16 14 1,10 [....]
 17 15 3 [....]
 18 '15' '5'²¹ [....]

'Rev.

1' [....] 'x' ina² ZÁ[LAG²] dele-bat e M[ÚL²]
 2' [x G]E₆ 29 ina ZÁLAG dele-bat SIG SI MÁ[Š nm mm]
 3' [M]U-48 'An u 'A[n A-šú LUGAL^{meš}]
 4' [i]n 19 IGI 'GU₄ x' [....]
 5' [U]SAN GU₄-U[D]
 6' 'x' [....]
 7' 'x' [....]
 8' [....]
 9' [MU-35 SI]G '25' [....]
 10' [....] UŠ NU PAP 'GAN' 21 'GENNA ina MÁŠ ŠÚ' ZÍZ 2 'GENNA' ina TIL 'MÁŠ IGI'
 11' [....] 'x' na-su in 20+'x' [šá AB] IGI ZÍZ GE₆ 10² ina ZÁLAG GENNA e MÚL ár šá
 SUḪUR MÁŠ 20 SI
 12' 'MU-15'-KAM 'Se LUGAL IZI in 24 AN ina ABSIN ŠÚ^{itu} ZÍZ in 25 AN ina GU IGI ŠE
 DIR

16 The 14th. sunset to moonrise: 1° 50'.
 17 The 14th. sunrise to moonset: 14° 30'²; measured.

III

1 The 15th, [....]
 2 The 27th, (moonrise to sunrise:)
 3 Month IX, the 1st (of which followed the 30th of the preceding month, sunset to
 moonset:) [....]
 4 The 10+[xth,]
 5 The 10+[xth,]
 6 The 15th', [....]
 7 The 15th', [....]
 8 The 20+[xth,]
 9 Month X, [....]
 10 The 10+[xth,]
 11 The 10+[xth,]
 12 The 15th', [....]
 13 The 16th, [....] 7° [....]
 14 The 28th, (moonrise to sunrise:) 11+[x°.]
 15 Month XI, the 1st (of which followed the 30th of the preceding month, sunset to
 moonset:) 22° [....]
 16 The 14th, [moonset to sunrise:] 1° 10' [....]
 17 The 15th, [moonrise to sunset:] 3° [....]
 18 The 15th, [sunrise to moonset:] 5°² [....]

'Rev.

1' [....], last part of the night, Venus was [....] above [....]
 2' [.... Ni]ght of the 29th, last part of the night, Venus was [....] below β Capricorni [....]
 3' [Y]ear 48, [kings] Antiochus and [his son] Antiochus. [....]
 4' (ideal) first appearance on the 19th. Month II, the xth, [....]
 5' first part of the night, Mercury [....]
 6' [....]
 7' [....]
 8' [....]
 9' [Year 35, Month] III, the 25th, [....]
 10' it became stationary [....]; I did not watch. Month IX, the 21st, Saturn's last appearance
 in Capricorn. Month XI, the 2nd, Saturn's first appearance in the end of Capricorn.
 11' [....] rising of Saturn to sunrise:; (ideal) first appearance on the 20+[xth of month X.]
 Month XI, night of the 10th², last part of the night, Saturn was 20 fingers above δ
 Capricorni.
 12' Year 15, king Seleucus. Month V, around the 24th, Mars' last appearance in Virgo. Month
 XI, around the 25th, Mars' first appearance in Aquarius. Month XII was intercalary.

- 13' MU-46-KAM ¹An u ¹Se LUGAL^{meš} itūŠE GE₆ 24 USAN AN ana NIM ina LAL-šú SIG MAŠ-MAŠ ár 2 KÙŠ
- 14' MU-47-KAM BAR GE₆ 17 USAN AN e MÚL IGI šá ALLA šá SI 4 SI i AN ana ŠÚ LAL GE₆ 22 USAN [AN]
- 15' SIG MÚL ár šá ALLA šá SI ½ KÙŠ GU₄ GE₆ 12 USAN AN SIG SAG A 4½ KÙŠ SIG GE₆ 1 USAN 'AN' [e LUGAL nn mm]
- 16' GE₆ 12 USAN AN e MÚL TUR šá 4 KÙŠ ár LUGAL 10 SI ŠU GE₆ 3 USAN AN SIG GIŠ.KUN A [nn mm]
- 17' [GE₆ x]+¹5¹ USAN AN e GÌR ár šá A 2 SI
- 18' [U₄-1-KAM] IGI-DUḪ-A^{meš} DIB-qa^{meš} u AN-KU₁₀^{meš} šá a-na MU-1,34-KAM ¹An [LUGAL]

Comments

Rev. 13': On this anomalous date see G. R. F. Assar and M. G. Bagloo, in Parthica 8 (2006), forthcoming.

No. 9

BM 34691 (= Sp II 178+989) + 45809 (= 81-7-6, 229)

Copies: LBAT 1223 (34691), 1224 (45809)

Photo: Pl. 9

Goal year: SE 95

Obv.

- 1' [x] 'x x' [....]
- 2' ina ZÁLAG dele-bat SIG MÚL á[r²]
- 3' 2½ KÙŠ LÁL itūSIG GE₆ [....]
- 4' dele-bat ina NIM ina ALLA ŠÚ itūKIN [....]
- 5' dele-bat SIG SI MÁŠ 2 5/6 KÙŠ itūGAN [....]
- 6' USAN dele-bat e MÚL ár šá SUḪUR MÁŠ 2 KÙŠ G[E₆]
- 7' GE₆ 16 USAN dele-bat SIG MÚL IGI šá SAG ḪUN 2¹ [....]
- 8' itūŠE GE₆ 7 USAN dele-bat SIG MÚL-MÚL 5/6 KÙŠ [....]
- 9' itūBAR GE₆ 2 USAN dele-bat SIG šur GIGIR šá SI 5/6 [KÙŠ] ana² NIM² D[IB²]
- 10' [MU-4]9-KAM ¹An u ¹Se LUGAL^{meš} itūBAR [x GU₄-UD ina ŠÚ] ina¹ TIL¹ GU₄-AN IGI 'x x' [....]
- 11' [šur GIG]IR šá SI 1½ KÙŠ GE₆ 26 USAN GU₄-UD [e MÚL IGI šá š]e-pit MAŠ-MAŠ 1½ KÙŠ GE₆ '28²¹ [USAN GU₄-UD]
- 12' [e MÚL á]r šá še-pit MAŠ-MAŠ 1 KÙŠ '8¹ SI itūGU₄ [GE₆ x] USAN GU₄-UD SIG MAŠ-MAŠ IGI 4 KÙŠ GE₆ 16 U[AN GU₄-UD]
- 13' [SIG MAŠ-MAŠ á]r 3 KÙŠ 27 GU₄-UD ina ŠÚ ina ALLA ŠÚ [itū]SIG in 20 GU₄-UD ina NIM ina TIL MAŠ-MAŠ IGI GE₆ 20+[x ina ZÁLAG]
- 14' [GU₄-UD S]IG MAŠ-MAŠ ár 2½ KÙŠ itūŠU in 'x¹+1 GU₄-UD ina NIM ina ALLA ŠÚ itūIZI 30 GU₄-UD ina ŠÚ

- 13' Year 46, kings Antiochus and Seleucus. Month XII, night of the 24th, first part of the night, Mars, while moving back to the east, was 2 cubits below β Geminorum.
- 14' Year 47. Month I, night of the 17th, first part of the night, Mars was 4 fingers above η Cancri, Mars being a little back to the west. Night of the 22nd, first part of the night, [Mars was]
- 15' ½ cubit below γ Cancri. Month II, night of the 12th, first part of the night, Mars was 4½ cubits below ε Leonis. Month III, night of the 1st, first part of the night, Mars was [.... above α Leonis.]
- 16' Night of the 12th, first part of the night, Mars was 10 fingers above ρ Leonis. Month IV, night of the 3rd, first part of the night, Mars was [....] below θ Leonis.
- 17' [Night of the x]+5th, first part of the night, Mars was 2 fingers above β Virginis.
- 18' [First days.] appearances, passings, and eclipses which [were established] for year 94. [king] Antiochus.

No. 9

Obv.

- 1' [....] [....]
- 2' last part of the night, Venus was [....] below [....]
- 3' 2½ cubits; it was balanced. Month III, night [....]
- 4' Venus' last appearance in the east in Cancer. Month VI, [....]
- 5' Venus was 2 5/6 cubits below β Capricorni. month IX, [....]
- 6' first part of the night, Venus was 2 cubits above δ Capricorni. Ni[ght]
- 7' Night of the 16th, first part of the night, Venus was 2² [cubits] below β Arietis [....]
- 8' Month XII, night of the 7th, first part of the night, Venus was 5/6 cubit below η Tauri [....]
- 9' Month I, night of the 2nd, first part of the night, Venus was 5/6 [cubit] below β Tauri, [.... pass]ed² to¹ the east [....]
- 10' [Year 4]9, kings Antiochus and Seleucus. Month I, [the xth, Mercury's] first appearance [in the west] in the end of Taurus² [....]
- 11' 1½ cubits [below] β Tauri. Night of the 26th, first part of the night, Mercury was 1½ cubits [above η] Geminorum. Night of the 28th¹, [first part of the night, Mercury was]
- 12' 1 cubit 8 fingers [above μ] Geminorum. Month II, [night of the xth,] first part of the night, Mercury was 4 cubits below α Geminorum. Night of the 16th, first [part of the night, Mercury was]
- 13' 3 cubits [below β Gemino]rum. The 27th, Mercury's last appearance in the west in Cancer. Month III, around the 20th, Mercury's first appearance in the east in the end of Gemini. Night of the 20+[xth, last part of the night,]
- 14' [Mercury was] 2½ cubits below β Geminorum. Month IV, around the [x]+1st, Mercury's last appearance in the east in Cancer. Month V, the 30th, Mercury's [first appearance] in the west

- 15' [ina x IGI^{itu}]KIN 10 GU₄-UD ina ŠÚ ina RÍN ŠÚ^{it}[u]DU₆ in 7 ina NIM ina RÍN IGI GE₆ 29 ina ZÁLAG GU₄-UD
- 16' [...]^{itu}APIN 11 GU₄-UD ina NIM ina GÍR-TAB ŠÚ^{itu}GAN 22 GU₄-UD ina ŠÚ ina MÁŠ IGI 14 na
- 17' [... ina ŠÚ ina] GU ŠÚ^{itu}ZÍZ 2 [G]U₄-UD ina NIM ina MÁŠ ki IGI NIM-a 22 na-su in
- 18' [x IGI GE₆ 1]3 ina ZÁLAG GU₄-UD SIG MÚL ár šá SUḪUR MÁŠ 2½ KÛŠ^{itu}ŠE 10 GU₄-UD 'ina NIM[?] ina x x ŠÚ[?] NU PAP
-
- 19' [MU-36-KAM¹An u¹Se LUGAL]^{meš itur}GU₄¹ [in[?]] 8[?] GENNA ana NIM ki UŠ-ú ina GU UŠ^{itu}ŠU[?] [x x]
- 20' [... MÚ]L ár šá SUḪUR MÁŠ UŠ^{itu}AB in 26
- 21' [GENNA ina x ŠÚ x x GENNA ina x IGI....] 'x¹ GE₆ 16 'x x x x x x'
-
- 22' [MU-16-KAM¹Se LUGAL x]+1 AN ana NIM ki UŠ-ú 3 KÛŠ
- 23' [...]^{itu}AB ina EN 30 AN ana ŠÚ ki U[Š-a]
- 24' [...] (blank)
-
- 25' [MU-48-KAM GE₆ x]+6[?] ina ZÁLAG AN SIG MÚL [...]
- 26' [...] 'x x x' [...]
- 'Rev.'
- 1' [... MÚ]L ár šá[?] [...]
- 2' [...] ana ŠÚ ina LAL-šú [...]
- 3' [...] 'x¹ 6 SI^{itu}ŠE [...]
- 4' [...] G[E₆ 5 USAN AN ana NIM ina L[AL-šú]
-
- I
- 1' [... M]E u G[E₆]
- 2' [ZÍZ] 'x¹ ŠÚ u na
- 3' 'x¹ ME u GE₆
- 4' 'ŠE x¹ 40 ŠÚ u na
- 5' 30 ME 'u GE₆¹
-
- 6' MU-'1,17-KAM¹Se LUGAL
- 7' BAR 1 19 KUR₄ muš
- 8' 13 9.50 ŠÚ NU PAP
- 9' 14 1 na muš
- 10' [15] 3,10 ME muš
- 11' [16] 15 GE₆ DIR NU PAP
- 12' [... x]+19 'DIR[?] NU PAP

- 15' [in] Month VI, the 10th, Mercury's last appearance in the west in Libra. Month VII, around the 7th, first appearance in the east in Libra. Night of the 29th, last part of the night, Mercury was
- 16' [...] Month VIII, the 11th, Mercury's last appearance in the east in Scorpius. Month IX, the 22nd, Mercury's first appearance in the west in Capricorn; sunset to setting of Mercury: 14°.
- 17' [...] last appearance [in the west in] Aquarius. Month XI, the 2nd, when Mercury first appeared in the east in Capricorn, it was high; rising of Mercury to sunrise: 22°; [(ideal first appearance] on
- 18' [the xth Night of the 1]3th, last part of the night, Mercury was 2½ cubits below δ Capricorni. Month XII, the 10th, Mercury's last appearance in the east[?] in; I did not watch.
-
- 19' [Year 36, kings Antiochus and Seleucus. Month II, [around[?]] the 8th[?], when Saturn became stationary to the east, it became stationary in Aquarius. Month IV[?], [...]
- 20' [...] became stationary [...] δ Capricorni. Month X, around the 26th,
- 21' [Saturn's last appearance in Saturn's first appearance in] night of the 16th,
-
- 22' [Year 16, king Seleucus the x]+1st, when Mars became stationary to the east, [it became stationary] 3 cubits
- 23' [...] Month X, around until the 30th, when Mars became stationary to the west,
- 24' [...]
-
- 25' [Year 48, night of the x]+6th[?], last part of the night, Mars was [...] below [...]
- 26' [...] [...]
- 'Rev.'
- 1' [...] rear star of [...]
- 2' [...] while moving back to the west, [...]
- 3' [...] 6 fingers [...] Month XII, [...]
- 4' [...] Night of the 5th, first part of the night, Mars, while moving back to the east, [...]
-
- I
- 1' 'moonrise to sunset' plus 'sunset to moonrise': [...]
- 2' [Month XI, 'moonset to sunrise' plus 'sunrise to moonset':
- 3' 'moonrise to sunset' plus 'sunset to moonrise':
- 4' Month XII, 'moonset to sunrise' plus 'sunrise to moonset': x° 40'
- 5' 'moonrise to sunset' plus 'sunset to moonrise': 30'
-
- 6' Year 77, king Seleucus.
- 7' Month I, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 19°; it was bright, measured.
- 8' The 13th, moonset to sunrise: 9° 50'; I did not watch.
- 9' The 14th, sunrise to moonset: 1°: measured.
- 10' [The 15th,] moonrise to sunset: 3° 10'; measured.
- 11' [The 16th,] sunset to moonrise: 15°; clouds. I did not watch.

- 13' [GU₄] '20' DIR' NU PAP
14' [.... N]U PAP

II

- 1' [x] 5' [....]
2' 10+[x] 4' [....]
3' 10+[x] 7 [....]
4' 27 10+[x]
5' KIN 30 [....]
6' 13 '5' [....]
7' 13 '2' [....]
8' 14 '4' [....]
9' 14 10+[x]
10' 27 [....]
11' DU₆ 1 [....]
12' 12+[x]
13' 11+[x]

III

- 1 [GAN] 1 19 *muš*
2 [12] 11,20 ŠÚ
3 [1]'3' 4.30 ME *muš*
4 '13' 10 NINDA *na muš*
5 [1]4 6 GE₆
6 27 19
7 [A]B 30 15,50 DIR NU PAP
8 [1]3 9,10 ŠÚ DIR NU PAP
9 [14] 4',50 ME DIR NU PAP
10 [14 x],20 *na* DIR NU PAP
11 [15 x],10' GE₆ *a* NU PAP
12 [.... x]+1 *muš*
13 [....] 'x NU PAP¹

IV (at right angles with rest of tablet)

- 1 [MU-1,17-KAM] 'S[e]-lu-ku LUGAL it[uŠU?]
2 [it^uIZI] GE₆ [x]+2 AN-KU₁₀ *sin* 2 [....]
3 [it^uA]B GE₆ 14 *in* 24 'x' [....]
4 GE₆ 29 1,19 GE₆ GIN AN-K[U₁₀ *šamáš*]

Left edge

- 1 [M]U-1,35-KAM 'rAn² [LUGAL]

Comments

Obv. 10': On the date see G. R. F. Assar and M. G. Bagloo, in *Parthica* 8 (2006), forthcoming.
17': the translation 'when' tries to take up *ki* before IGI; this is quite uncertain, however.
18': Mercury can never be 2½ cubits below δ Capricorni. On the date given, Venus was ca. 7° above Mercury; maybe this caused the error.
IV 1f.: month names restored from computation.

- 12' [The xth.] (moonrise to sunrise:) [x]+19°; clouds, I did not watch.
13' [Month II,] 20'; clouds, I did not watch.
14' [....] I did not watch.

II

- 1' [The xth,] 5^o [....]
2' The 10+[xth,] 4^o [....]
3' The 10+[xth,] 7° [....]
4' The 27th, (moonrise to sunrise:) 10+[x°]
5' Month VI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [....]
6' The 13th, [moonrise to sunset:] 5° [....]
7' The 13th, [moonset to sunrise:] 2° [....]
8' The 14th, [sunset to moonrise:] 4^o [....]
9' The 14th, [sunrise to moonset:] 10+[x°]
10' The 27th, [....]
11' Month VII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) [....]
12' The 12+[xth,]
13' The 11+[xth,]

III

- 1 [Month IX,] the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 19°; measured.
2 [The 12th,] moonset to sunrise: 11° 20'.
3 The [1]3th, moonrise to sunset: 4° 30'; measured.
4 The 13th', sunrise to moonset: 10'; measured.
5 [The 1]4th, sunset to moonrise: 6°.
6 The 27th, (moonrise to sunrise:) 19°.
7 Month X, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 15° 50'; clouds, I did not watch.
8 [The 1]3th, moonset to sunrise: 9° 10'; clouds, I did not watch.
9 [The 14th,] moonrise to sunset: 4^o 50'; clouds, I did not watch.
10 [The 14th,] sunrise to moonset: [x°] 20'; clouds, I did not watch.
11 [The 15th,] sunset to moonrise: [x°] 10'; mist, I did not watch.
12 [.... x]+1°; measured.
13 [....]; I did not watch.

IV (at right angles with rest of tablet)

- 1 [Year 77,] king Seleucus. Mon[th IV',]
2 [Month V,] night of the [x]+2nd, lunar eclipse, 2 [....]
3 [Month] X, night of the 14th, at 24° [....]
4 Night of the 29th, 79° after sunset, [solar] eclipse [....]

Left edge

- 1 Year 95, [king] Antiochus, [....]

No. 10

BM 35388 (= Sp II 970)

Copy: LBA 1225

Photo: Pl. 10f.

Bibliography: L. Brack-Bernsen, SEAC 5th (1999) 20.35ff.

Goal year: SE 96

Upper edge

1 'ina a-mat^dEN x x x¹ liš-lim²

Obv.:

1 [MU-25-KAM] '1Se-lu-ku' à '1An¹-[ti-'u-uk-su LUGAL]^{meš} ituŠU in 18 MÚL-BABBAR
ina A ŠÚ2 [...]'x¹ ituGAN EN 18 MÚL-BABBAR ana NIM

3 [ki UŠ-ú] ituZÍZ 16 MÚL-BABBAR ana ME E-a

4 M[U-13-KAM] 'x x LUGAL¹ ituSIG GE₆ 20 USAN MÚL-BABBAR ina IGI
LUGAL 8 SI5 i^{tu}x GE₆ x USAN MÚL-BABBAR SIG GIŠ.KUN] A 4 KÙŠ ituZÍZ GE₆ 29 USAN
MÚL-BABBAR SIG GIŠ.KUN A 4 KÙŠ6 MU-1[28-KAM] dele-bat [SIG] 'šur GIGIR¹ šá SI 5/6 KÙŠ i-ši dele-bat ana NIM
DIB7 'x¹ [...] 1½ KÙŠ G[E₆] 10+[x] 'USAN¹ dele-bat e MÚL IGI šá še-pít MAŠ-MAŠ 1½
KÙŠ8 [... e MÚL ár šá še]-pít MAŠ-MAŠ 1½ KÙŠ GE₆ 17 USAN dele-bat e MAŠ-MAŠ šá
SIPA 4½ KÙŠ9 [...] 'x¹ [...] ituSIG 3 dele-bat ina ŠÚ ina MAŠ-MAŠ ŠÚ NU PAP10 'x¹ [...] 'x¹ [x] x [x] 'in¹ 15 IGI ituŠU11 [...] GE₆ 10+[x ina ZÁLAG] 'dele-bat¹ [x] MÚL ár šá še-pít MAŠ-MAŠ 1½ KÙŠ12 G[E₆] 'x ina ZÁLAG¹ dele-bat SIG MAŠ-MAŠ IGI 5½ KÙŠ13 G[E₆] 'x¹ [MÚL x] 'šá¹ ALLA šá ULÙ 14 SI14 [...] 'dele-bat SIG¹ LUGAL 5 SI LÁL GE₆ 2215 [...] 'SI¹ GE₆ 30 ina ZÁLAG dele-bat SIG GIŠ.KUN A 4 KÙŠ16 [... GÌR] 'ár šá¹ A 3 S[I] GE₆ 21 ina ZÁLAG dele-bat SIG DELE šá IGI ABSIN 14 SI17 [... dele-bat e] 'SA₄¹ šá ABSIN 1½ KÙŠ GE₆ 19 ina ZÁLAG dele-bat e RÍN šá ULÙ
5/6 KÙŠ18 [...] 'dele-bat¹ [SIG RÍN] šá SI 3 KÙŠ ituGAN GE₆ 4 ina ZÁLAG dele-bat e MÚL e šá
SAG GÍR-TAB 2 SI i-ša dele-bat ana ŠÚ LAL19 [...] 'dele-bat e SI₄¹ 2¹ KÙŠ GE₆ 21 ina ZÁLAG dele-bat e MÚL KUR šá KIR₄ šil PA
1 KÙŠ 4 SI20 [...] 'x¹ dele-bat SIG 'SI¹ MÁŠ 2½ KÙŠ at-ta-šar u SI NU IGI ituZÍZ 1621 [x na šá dele-bat] 'in¹ 20 dele-bat ina NIM ina GU ŠÚ ŠE DIR22 [MU-50-KAM] '1An-ti-'u-uk-su LUGAL GAL u An-ti-'u-uk-su DUMU-šú LUGAL
ituBAR 7 GU₄-UD ina ŠÚ ina SAG MÚL-MÚL IGI NU PAP

No. 10

Upper edge

1 At the command of Bel, may it go well.

Obv.:

1 [Year 25, king]s Seleucus and Ant[iochus.] Month IV, around the 18th, Jupiter's last
appearance in Leo.

2 [...] Month IX, until the 18th, [when] Jupiter [became stationary] to the east,

3 [...] Month XI, the 16th, Jupiter's acronychal rising.

4 Y[ear 13,] king Month III, night of the 20th, first part of the night, Jupiter was
8 fingers in front of α Leonis.5 Mo[nth] 4 cubits [below θ Leon]is. Month XI, night of the 29th, first part of the
night, Jupiter was 4 cubits below θ Leonis.6 Year 8[8,] Venus was 5/6 cubit below β Tauri, Venus having passed a little to the
east.7 [...] [...] 1½ cubits. Night of the 10+[xth,] first part of the night, Venus was 1½ cubits
above η Geminorum.8 [...] 1½ cubits [above μ Ge]minorum. Night of the 17th, first part of the night, Venus
was 4½ cubits above γ Geminorum.9 [...] [...] Month III, the 3rd, Venus' last appearance in the west in Gemini; I did not
watch.

10 [...] [...] (ideal) first appearance on the 15th. Month IV,

11 [...] Night of the 10+[xth, last part of the night,] Venus was 1½ cubits [...] μ
Geminorum.

12 Ni[ght] last part of the night, Venus was 5½ cubits below α Geminorum.

13 Ni[ght] 14 fingers θ/δ Cancr.

14 [...] Venus was 5 fingers below α Leonis, balanced. Night of the 22nd,

15 [...] fingers¹ [...] Night of the 30th, last part of the night, Venus was 4 cubits below θ
Leonis.16 [...] 3 fingers [...] β] Virginis. Night of the 21st, last part of the night, Venus was 14
fingers below γ Virginis.17 [...] Venus was] 1½ cubits [above] α Virginis. Night of the 19th, last part of the night,
Venus was 5/6 cubit above α Librae.18 [...] Venus was 3 cubits [below β] Librae. Month IX, night of the 4th, last part of the
night, Venus was 2 fingers above β Scorp., Venus being a little back to the west.19 [...] Venus was 2¹ cubits above α Scorp. Night of the 21st, last part of the night,
Venus was 1 cubit 4 fingers above θ Ophiuchi.20 [...] Venus was 2½ cubits below β Capricorni; I watched, but I did not see β. Month
XI, the 16th.21 [rising of Venus to sunrise:] Around the 20th, Venus' last appearance in the east in
Aquarius. Month XII was intercalary.22 [Year 50,] Antiochus, great king, and his son Antiochus, king. Month I, the 7th,
Mercury's first appearance in the west in the beginning of Taurus; I did not watch.

- 23 [... USA]N GU₄-UD *e is* le₁₀ x KÙŠ GE₆ 25 USAN GU₄-UD SIG šur GIGIR šá SI 1
KÙŠ 4 SI
- 24 [...] 'USAN GU₄-UD' *e šur* GIGIR šá ULÛ 1 5/6 KÙŠ it_uGU₄ 17 ŠÚ šá GU₄-UD *ina*
ŠÚ
- 25 [*ina* x] TA 13 'ki PAP' NU IGI 13 GU₄-UD *ina* ŠÚ *ina* SAG MAŠ-MAŠ ŠÚ NU
P[AP]
- 26 [...] 'x' [x] 'ina MAŠ-MAŠ IGI' 10' 30 *na-su* it_uŠU *in* 7 GU₄-UD *ina* NI[M *ina* x]
'ŠÚ'
- 27 [...] 'x A?' GE₆ 28 USAN GU₄-UD SIG [...] KÙŠ?
- 28 [...] *ina* 'RÍN ŠÚ' it_uDU₆ 'x GU₄-[UD ...]

Rev.

- 1' [...] it_uG[AN' x]+7' GENNA' *ina* GU ŠÚ it_urZÍZ *in* 21' GENNA 'ina GU IGI' [...]
- 2' [MU-17-KAM ¹Se-l]u-ku LUGAL it_uDU₆ *in* 7 AN *ina* GÍR-TAB ŠÚ
- 3' [MU-49-KAM ¹An-ti-u-uk-su u ¹Se-lu-ku LUGAL meš it_uBAR GE₆ 5 USAN AN *ana*
NIM
- 4' [*ina* LAL-šú SIG SA]G A 2½ KÙŠ GE₆ 25 USAN AN *e* LUGAL 14 SI it_uGU₄ GE₆ 9
- 5' [USAN AN *e* MÚ]L TUR šá 4 KÙŠ ár LUGAL ½ KÙŠ GE₆ 28 USAN AN SIG
GIŠ.KUN A 4 KÙŠ
- 6' [...] USAN AN *e* GÍR ár šá A 1 SI TE it_uŠU GE₆ 6 USAN AN
- 7' [...] nn] KÙŠ GE₆ 29 USAN AN *e* SA₄ šá ABSIN 1 KÙŠ it_uIZI GE₆ 30
- 8' [...] RÍN šá U]LÛ 8 SI it_uKIN GE₆ 7 USAN AN SIG RÍN šá SI 4 KÙŠ

I

- 1 [MU-1,17-KAM ¹Se] LUGAL
- 2 [DU₆ x ŠÚ u] 'na'
- 3-8 (broken)
- 9 [x ME u G]E₆
- 10 [ZÍZ x ŠÚ] u na
- 11 [x ME] u GE₆
- 12 [ŠE x Š]Ú u na
- 13 [x ME] u GE₆
- 14 [MU-1,18-KAM] ¹Se? LUGAL
- 15 [...]
- 16 [x x]+1,30 ŠÚ
- 17 [x x],30 'x'
- 18 [x x] 'x' [x]
- 19 [x x] 'x' [x]

- 23 [... first part] of the night, Mercury was x cubits above α Tauri. Night of the 25th,
first part of the night, Mercury was 1 cubit 4 fingers below β Tauri.
- 24 [...] first part of the night, Mercury was 1 5/6 cubits above ζ Tauri. Month II, the
17th, Mercury's last appearance in the west
- 25 [in ...;] from the 13th, when I watched I did not see it. The 13th, Mercury's last
appearance in the west in the beginning of Gemini; I did not watch.
- 26 [...] ... first appearance [...] in Gemini; rising of Mercury to sunrise: 10° 30'. Month
IV, around the 7th, Mercury's last appearance in the east [in ...]
- 27 [...] Leonis'. Night of the 28th, first part of the night, Mercury was [nn] cubits'
below [...]
- 28 [...] last appearance [...] in Libra. Month VII, the xth, Merc[ury ...]

Rev.

- 1' [...] Month IX', [the x]+7th, Saturn's last appearance in Aquarius. Month XI, around
the 21st, Saturn's first appearance in Aquarius. [...]
- 2' [Year 17,] king [Sel]eucus. Month VII, around the 7th, Mars' last appearance in
Scorpius.
- 3' [Year 49,] kings Antiochus and Seleucus. Month I, night of the 5th, first part of the
night, Mars,
- 4' [while moving back to the east, was] 2½ cubits [below ε] Leonis. Night of the 25th,
first part of the night, Mars was 14 fingers above α Leonis. Month II, night of the
9th.
- 5' [first part of the night, Mars was] ½ cubit [above] ρ Leonis. Night of the 28th, first
part of the night, Mars was 4 cubits below θ Leonis.
- 6' [...] first part of the night, Mars was 1 finger above β Virginis, it came close. Month
IV, night of the 6th, first part of the night, Mars was
- 7' [nn] cubits [...] Night of the 29th, first part of the night, Mars was 1 cubit above α
Virginis. Month V, night of the 30th,
- 8' 8 fingers [...] α Lib]rae. Month VI, night of the 7th, first part of the night, Mars was
4 cubits below β Librae.

I

- 1 [Year 77,] king [Seleucus.]
- 2 [Month VII, 'moonset to sunrise' plus] 'sunrise to moonset': [...]
- 3-8 (broken)
- 9 ['moonrise to sunset' plus 'sunset] to moonrise': [...]
- 10 [Month XI, 'moonset to sunrise'] plus 'sunrise to moonset': [...]
- 11 ['moonrise to sunset'] plus 'sunset to moonrise': [...]
- 12 [Month XII, 'moonset] to sunrise' plus 'sunrise to moonset': [...]
- 13 ['moonrise to sunset'] plus 'sunset to moonrise': [...]
- 14 [Year 78,] king Seleucus'.
- 15 [...]
- 16 [...] moonset to sunrise: [x]+1° 30'
- 17 [...] 30' [...]
- 18 [...] ... [...]
- 19 [...] ... [...]

II

- 1 GU₄ 1 20 *muš*
- 2 13 6 ŠÚ *muš*
- 3 14 1 *na muš*
- 4 15 30 NINDA ME DIR NU PAP
- 5 16 9,30 GE₆ DIR NU PAP
- 6 26 15,30 DIR NU PAP
- 7 SIG 30 14,50 DIR KALAG NU PAP
- 8 14 4,50 ŠÚ NU PAP
- 9 15 9,30 ME *muš*
- 10 15 5,30 *na* DIR NU PAP
- 11 16¹ 8,50 GE₆
- 12 27 14 *muš*
- 13 ŠU 1 18 *muš*
- 14 1[4] 12,30 ME *muš*
- 15 1[4] 1,30 ŠÚ
- 16 1'5' 3 GE₆
- 17 [1]'5' 11,30 *na muš*
- 18 [x] x]+1 *muš*

III

- 1 IZI 30 10,50 *a ki* PAP NU IGI
- 2 14 15 ME *a muš*
- 3 14 8 ŠÚ
- 4 15 20 NINDA GE₆ *a* NU PAP
- 5 15 8 *na muš*
- 6 28¹ 10,20 *a* NU IGI
- 7 KIN 1 13 SIG *muš*
- 8 13¹ 14 ŠÚ
- 9 14 1,20 ME
- 10 14 2 *na*
- 11 15 8,30 GE₆
- 12 27 22,30
- 13 DU₆ 1 16 *muš*
- 14 13 3,40 ME *muš*
- 15 13 2,50 ŠÚ
- 16 14 6 GE₆
- 17 14 14 *na muš*
- 18 27 18 *muš*
- 19 APIN 1 18 *muš* KUR₄ *ina* GUB *a-pir*

II

- 1 Month II, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 20°, measured.
- 2 The 13th, moonset to sunrise: 6°; measured.
- 3 The 14th, sunrise to moonset: 1°; measured.
- 4 The 15th, moonrise to sunset: 30'; clouds, I did not watch.
- 5 The 16th, sunset to moonrise: 9° 30'; clouds, I did not watch.
- 6 The 26th, (moonrise to sunrise:) 15° 30'; clouds, I did not watch.
- 7 Month III, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 14° 50'; dense clouds, I did not watch.
- 8 The 14th, moonset to sunrise: 4° 50'; I did not watch.
- 9 The 15th, moonrise to sunset: 9° 30'; measured.
- 10 The 15th, sunrise to moonset: 5° 30'; clouds, I did not watch.
- 11 The 16th, moonrise to sunset: 8° 50'.
- 12 The 27th, (moonrise to sunrise:) 14°; measured.
- 13 Month IV, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 18°; measured.
- 14 The 1[4th,] sunrise to moonset: 12° 30'; measured.
- 15 The 1[4th,] moonset to sunrise: 1° 30'.
- 16 The 15th, sunset to moonrise: 3°.
- 17 [The 1]5th, sunrise to moonset: 11° 30'; measured.
- 18 [The xth, (moonrise to sunrise:) x]+1°; measured.

III

- 1 Month V, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 10° 50'; mist, when I watched I did not see it.
- 2 The 14th, moonrise to sunset: 15°; measured (despite) mist.
- 3 The 14th, moonset to sunrise: 8°.
- 4 The 15th, sunset to moonrise: 20'; mist, I did not watch.
- 5 The 15th, sunrise to moonset: 8°; measured.
- 6 The 28th¹, (moonrise to sunrise:) 10° 20'; mist, I did not watch.
- 7 Month VI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 13°; it was faint, measured.
- 8 The 13th, moonset to sunrise: 14°.
- 9 The 14th, moonrise to sunset: 1° 20'.
- 10 The 14th, sunrise to moonset: 2°.
- 11 The 15th, sunset to moonrise: 8° 30'.
- 12 The 27th, (moonrise to sunrise:) 22° 30'.
- 13 Month VII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 16°; measured.
- 14 The 13th, moonrise to sunset: 3° 40'; measured.
- 15 The 13th, moonset to sunrise: 2° 50'.
- 16 The 14th, sunset to moonrise: 6°.
- 17 The 14th, sunrise to moonset: 14°; measured.
- 18 The 27th, (moonrise to sunrise:) 18°; measured.
- 19 Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 18°; measured; it was bright. earthshine while (the sun?) stood there¹.

20	1[2]	8,30	ME <i>muš</i>
21	12	1 ^x .30	ŠÚ
22	13	1	GE ₆ <i>muš</i>
23	13 [?]	5	<i>na muš</i>
24	20+[x]		[x]+4 <i>muš</i>

IV

1	GAN 30 13	<i>muš</i>
2	13	6,20 ME DIR NU PAP
3	13	2,20 ŠÚ
4	14	3 GE ₆
5	14	11 <i>na muš</i>
6	27	22 <i>muš</i>
7	AB 1 17,40	DIR KALAG NU PAP
8	12	8 ŠÚ
9	13	6,30 ME DIR <i>muš</i>
10	13	5 <i>na DIR muš</i>
11	14	5 GE ₆
12	27	16 [?]
13	ZÍZ 30 10+[x].30	DIR NU PAP
14	13	3,20 ŠÚ DIR NU PAP
15	14	5,40 ME DIR NU PAP
16	14	9 <i>na muš</i>
17	15	8,30 GE ₆
18	27	18,40 DIR NU PAP
19	ŠE 1 23 <i>muš</i>	KUR ₄ <i>a-pir</i>
20	12	4,20 ŠÚ
21	13	2,10 <i>na DIR NU PAP</i>
22	14	50 NINDA ME DIR <i>muš</i>
23	15	11 GE ₆ DIR <i>muš</i>
24	27	21,10 <i>ki</i> PAP NU IGI
25	DIR 30 21,40	D[IR [?] x]
26	13	1,50 ŠÚ DIR NU PAP
27	14	11 ME <i>muš</i>
28	14	6,30 <i>na muš</i>
29	15	2,40 GE ₆
30	27	8,40

Colophon (across columns I and II)

- 1 [U₄-1-KAM IGI]^{meš} DIB-qa^{meš} u AN-KU₁₀^{meš} šá[?]
- 2 [ana MU-1,36-KA]M ¹An-t[i-²u-uk-su LUGAL]
- 3 kun-nu-[u]

- 20 The 1[2th.] moonrise to sunset: 8° 30'; measured.
- 21 The 12th. moonset to sunrise: x° 30'.
- 22 The 13th. sunset to moonrise: 1°; measured.
- 23 The 13th[?]. sunrise to moonset: 5°; measured.
- 24 The 20+[xth.] (moonrise to sunrise:) [x]+4°; measured.

IV

- 1 Month IX, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13°; measured.
- 2 The 13th. moonrise to sunset: 6° 20'; clouds, I did not watch.
- 3 The 13th. moonset to sunrise: 2° 20'.
- 4 The 14th. sunset to moonrise: 3°.
- 5 The 14th. sunrise to moonset: 11°; measured.
- 6 The 27th. (moonrise to sunrise:) 22°; measured.
- 7 Month X, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17° 40'; dense clouds, I did not watch.
- 8 The 12th. moonset to sunrise: 8°.
- 9 The 13th. moonrise to sunset: 6° 30'; measured (despite) clouds.
- 10 The 13th. sunrise to moonset: 5°; measured (despite) clouds.
- 11 The 14th. sunset to moonrise: 5°.
- 12 The 27th. (moonrise to sunrise:) 16°?
- 13 Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 10+[x°] 30'; clouds, I did not watch.
- 14 The 13th. moonset to sunrise: 3° 20'; clouds, I did not watch.
- 15 The 14th. moonrise to sunset: 5° 40'; clouds, I did not watch.
- 16 The 14th. sunrise to moonset: 9°; measured.
- 17 The 15th. sunset to moonrise: 8° 30'.
- 18 The 27th. (moonrise to sunrise:) 18° 40'; clouds, I did not watch.
- 19 Month XII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 23°; measured; it was bright, earthshine.
- 20 The 12th. moonset to sunrise: 4° 20'.
- 21 The 13th. sunrise to moonset: 2° 10'; clouds, I did not watch.
- 22 The 13th. moonrise to sunset: 50'; measured (despite) clouds.
- 23 The 14th. sunset to moonrise: 11°; measured (despite) clouds.
- 24 The 27th. (moonrise to sunrise:) 21° 10'; when I watched I did not see it.
- 25 Month XII₂, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 21° 40'; cl[ouds, ...]
- 26 The 13th. moonset to sunrise: 1° 50'; clouds, I did not watch.
- 27 The 14th. moonrise to sunset: 11°; measured.
- 28 The 14th. sunrise to moonset: 6° 30'; measured.
- 29 The 15th. sunset to moonrise: 2° 40'.
- 30 The 27th. (moonrise to sunrise:) 8° 40'.

Colophon

- 1 [First days, first appear]ances, passings, and eclipses, which
- 3 were established
- 2 [for year 96, king] Ant[iochus.]

Comments

Upper edge: badly preserved, mostly guesswork; the second divine name does not look like Beltija.

Obv. 4: the royal name before LUGAL is unfortunately illegible, but there is far more space than is required just for *Se-lu-ku*.

24f.: note that here two conflicting statements are given concerning Mercury's last appearance.

27: On V 28, Mercury was below α Virginis, but far less than even $\frac{1}{2}$ cubit; so the sign KÙŠ at the end of the line after the break may belong to the next line.

Rev. 3': On the date see G. R. F. Assar and M. G. Bagloo, in *Parthica* 8 (2006), forthcoming.

Rev. II 11: the tablet has the day number 15 by error.

No. 11

BM 36772 (= 80-6-17, 509)

Listed as LBAT *1227

Photo: Pl. 12

Goal-year: SE 97

Obv.:

- 1 [... MÚL]-BABBAR ana ŠÚ ki UŠ-a 8 SI ina IGI 'A² ár¹ UŠ² itu[IZI²]
- 2 [...] 'x¹ IGI ituZÍZ U₄-1² MÚL-BABBAR ana 'NIM ki¹ UŠ-ú 1 'KÙŠ ár² MÚL¹
- 3 [... ana ME] E-a ŠE DIR
- 4 [... SIG GIŠ.KUN] A 3½ KÙŠ ituŠU GE₆ 24 USAN MÚL-BABBAR e GÌR ár šá A 6 SI
- 5 [MU-1,29-KAM dele-bat ina ŠÚ ina M]ÚL-MÚL IGI NU PAP ituSIG GE₆ 7 USAN dele-bat SIG SAG A 3½ KÙŠ
- 6 [...] 5/6 KÙŠ GE₆ 29 dele-bat SIG GIŠ.KUN^{sic} 4½ KÙŠ ituŠU GE₆ 6 USAN dele-bat
- 7 [e GÌR ár šá A DELE šá IGI ABS]IN 14 SI ituIZI¹ GE₆ 1 USAN dele-bat e SA₄ šá ABSIN 1 KÙŠ 8 SI
- 8 [... SIG RÍN šá] SI 4½ KÙŠ ituKIN GE₆ 5 USAN dele-bat e MÚL MURUB₄ šá SAG GÌR-TAB 2 SI i-ša dele-bat ana NIM DIB
- 9 [... USA]N dele-bat SIG šil PA 5² SI ituAPIN GE₆ 1 USAN dele-bat SIG SI MÁŠ 3 KÙŠ
- 10 [...] x¹ ár ½ KÙŠ ituAB [x] dele-bat ina ŠÚ ina MÁŠ ŠÚ 6 'dele-bat¹ [...]
- 11 [...] 'šá SUHUR MÁŠ x¹ [x] 'x¹ [...]

Rev. (at right angles)

- 1 [... ki] PAP NU IGI
- 2 [... AN-K]U₁₀ šámaš ki PAP NU IGI

Upper edge

- 1 [...] AN-KU₁₀^{meš} šá a-na MU-1,37-KAM 'An 'LUGAL' k[un-nu-u]

Comments

Obv. 1: Jupiter's second station took place near σ Leonis, but I cannot read the signs.

10: Venus was above δ Capricorni ca. on IX 20, but much more than $\frac{1}{2}$ cubit; also, the name of either γ or δ Capricorni is written differently in line 11.

No. 11

Obv.:

- 1 [...] when Jupiter became stationary to the west, it became stationary 8 fingers in front of Month [V'],
- 2 [...] first appearance Month XI, 1st day, when Jupiter became stationary to the east, [it became stationary] 1 cubit behind'
- 3 [...] acronychal] rising. Month XII was intercalary.
- 4 [...] Jupiter was] 3½ cubits [below θ] Leonis. Month IV, night of the 24th, first part of the night, Jupiter was 6 fingers above β Virginis.
- 5 [Year 89, Venus] first appearance [in the west in] Taurus; I did not watch. Month III, night of the 7th, first part of the night, Venus was 3½ cubits below ϵ Leonis.
- 6 [...] 5/6 cubit. Night of the 29th, Venus was 4½ cubits below θ Leonis. Month IV, night of the 6th, first part of the night, Venus was
- 7 [...] above β Virginis] 14 fingers [...] γ Virginiis. Month V, night of the 1st, first part of the night, Venus was 1 cubit 8 fingers above α Virginis.
- 8 [...] 4½ cubits [below β Lj]brae. Month VI, night of the 5th, first part of the night, Venus was 2 fingers above δ Scorpii, Venus having passed a little to the east.
- 9 [...] first part] of the night, Venus was 5' fingers below θ Ophiuchi. Month VIII, night of the 1st, first part of the night, Venus was 3 cubits below β Capricorni.
- 10 [...] ½ cubit [...] δ ' [Capricorni?]. Month X, [the xth,] Venus' last appearance in the west in Capricorn. The 6th, Venus' [first appearance in the east]
- 11 [...] Capricorni [...]

Rev. (at right angles)

- 1 [...] when] I watched I did not see it.
- 2 [...] solar eclipse; when I watched I did not see it.

Upper edge

- 1 [...] and eclipses which were est[ablished] for year 97, king Antiochus.

No. 12

BM 41643 (= 81-6-25, 259)

Copy: LBA 1228

Photo: Pl. 12

Goal year: SE 97

Obv.

- 1' [...] 'x' [...]
 2' [...] 'x x x x x ŠE' 29 GU₄-UD *ina* Š[Ú *ina* x ŠÚ]

 3' [MU-37(-KAM) it_uKI]N-DIR MU-38 it_uSIG *in* EN 15 GENNA *ana* N[IM *ki* UŠ-ú]
 4' [...] GENNA *ana* ME] 'E'-a it_uDU₆ EN 4 GENNA *ana* ŠÚ *ki* UŠ-a *ina* G[U UŠ]
 5' [...] 2]1 GENNA *ina* zib^{me} IGI KUR NIM-a 18 *na in* 19 I[GI]

 6' (erasure)
 7' [...] x]+5 IGI it_uAPIN *in* EN 29 AN *ana* NIM [*ki* UŠ-ú]
 8' [...] 16 AN *ana* ME E it_uZÍZ EN 22 [*ana* ŠÚ *ki* UŠ-a]

Rev.

- 1 [MU-50(-KAM) it_uSIG GE₆ 7 *ina* ZÁLAG AN *e is* le₁₀ 2 5/6 KÜŠ GE₆ 10+[x]
 2 [...] K]ÜŠ GE₆ 29 *ina* ZÁLAG AN *e šur* ULÙ 1 KÜŠ it_uŠU GE₆ [...]
 3 [...] *ina* ZÁLAG AN *e* MÚL *ár šá še-pít* MAŠ-MAŠ ½ KÜŠ GE₆ 21 <*ina* ZÁLAG> AN
e MAŠ-[MAŠ *šá* SIPA nn mm]
 4 [...] GE₆ 14 *ina* ZÁLAG AN SIG MAŠ-MAŠ *ár* 2½ KÜŠ it_uKIN GE₆ 2 *ina* ZÁLAG
 A[N]
 5 [...] *ana*] ŠÚ LAL GE₆ 8 *ina* ZÁLAG AN *e* MÚL *ár šá* ALLA *šá* ULÙ 8 SI [...]
 6 [...] GE₆ 17 *ina* ZÁLAG AN *e* LUGAL 8 SI GE₆ 28 *ina* ZÁLAG AN *e* [MÚL TUR *šá* 4
 KÜŠ *ár* LUGAL]
 7 [...] KÜŠ it_uGAN GE₆ 25 *ina* ZÁLAG AN *e* GÌR *ár šá* A 1 KÜŠ it_u[AB]
 8 [...] KÜŠ 8 SI it_uZÍZ GE₆ 25 USAN AN SIG GIŠ.KUN A [...]

Of the continuation in 4 columns, I and II are broken:

III

- 9 [...] it_uDU₆ 1 15,30 'na'-su⁷¹ [x x x x] 'x' [...]

No. 12

Obv.

- 1' [...] [...]
 2' [...]Month XII, the 29th, Mercury's [last appearance] in the we[st in]

 3' [Year 37,] month VI was intercalary. Year 38, month III, around until the 15th, when
 Saturn [became stationary] to the east,
 4' [...] acronychal] rising. Month VII, until the 4th, when Saturn became stationary to the
 west, [it became stationary] in Aqua[rius].
 5' [...] the 2]1st, Saturn's first appearance in Pisces; it was bright (and) high, rising of Saturn
 to sunrise: 18°; (ideal) first appearance on the 19th.

 6' (erasure)
 7' [...] (ideal) first appearance [on the x]+5th. Month VIII, around until the 29th, [when]
 Mars [became stationary] to the east,
 8' [...] the 16th, Mars' acronychal rising. Month XI, until the 22nd, [when Mars became
 stationary to the west,]

Rev.

- 1 [Year 50,] Month III, night of the 7th, last part of the night, Mars was 2 5/6 cubits
 above α Tauri. Night of the 10+[xth,]
 2 [...] cu]bits. Night of the 29th, last part of the night, Mars was 1 cubit above ζ Tauri.
 Month IV, night [...]
 3 [...] last part] of the night, Mars was ½ cubit above μ Geminorum. Night of the 21st,
 <last part of the night,> Mars was [...] above γ [Geminorum].
 4 [...] night] of the 14th, last part of the night, Mars was 2½ cubits below β Geminorum.
 Month VI, night of the 2nd, last part of the night, Mars was [...]
 5 [...] being back to the west. Night of the 8th, last part of the night, Mars was 8 fingers
 above δ Cancri. [...]
 6 [...] Night of the 17th, last part of the night, Mars was 8 fingers above α Leonis. Night
 of the 28th, last part of the night, Mars was [...] above [Q Leonis]
 7 [...] cubits. Month IX, night of the 25th, last part of the night, Mars was 1 cubit above
 β Virginis. Month [X,]
 8 [...] cubits 8 fingers [...] Month XI, night of the 25th, first part of the night, Mars was
 [...] below θ Leonis.

III

- 9 Month VII, the 1st (of which followed the 30th of the preceding month,) sunset to moonset:
 15° 30' [...]

No. 13

Rm 739

Copy: LBA 1226

Photo: Pl. 12

Goal year: SE 97

Flake

- 1' [...] 'x' 12 GU₄-UD *ina* 'NIM *ina* GU IGI' x' [...]
 2' [...] x]+19 GU₄-UD *ina* NIM *ina* GU ŠÚ NU PAP ŠE I G[U₄-UD *ina* ŠÚ *ina* x IGI [...]
-
- 3' [MU-37-KAM 'An u 'S]e LUGAL^{meš} KIN-DIR MU-3[8]-KAM SIG *in* [...]
 4' [...] 'x' GENNA *ana* ME E-a [x x GENN]A 'ana' [ŠÚ [...]
 5' [...] x]+11 GENNA *ina* z[ib^{me} [...]
-
- 6' [...] 25 'x' [...]
 7' [...] 'x' [...]

Comments

2': a restoration [AB 2]9 would fit computation for SE 51.

5': Both a last and a first appearance of Saturn occurred towards the end of SE 38.

No. 14

BM 45787 + 46057 (= 81-7-6, 203+504)

Copies: LBA 1229 (45787), 1230 (46057)

Photo: Pl. 13

Goal year: SE 105

Obv.

- 1' [...] 'ŠU GE₆' 5' *ina* ZÁLAG GENNA e MAŠ-MAŠ šá' SI[PA] 'x KÜŠ x' [...]
 2' [...] 'MAŠ-MAŠ IGI' ½ KÜŠ *ana* ŠÚ LAL UŠ APIN 30 GENNA *ana* ME E-a ZÍZ *in* EN 5 GENNA *ana* 'ŠÚ' [...]
-
- 3' [MU]-26-KAM 'Se u 'An LUGAL^{meš} SIG 23 AN *ina* ALLA ŠÚ KIN 28 AN *ina* ABSIN IGI 17' [...]
-
- 4' [MU]-58-KAM 'An-ti-u-uk-su LUGAL BAR GE₆ 19 USAN AN e MÚL IGI šá še-pít M[AŠ-MAŠ [...]
 5' [x x] 'AN' e MÚL ár šá še-pít MAŠ-MAŠ 20 SI GU₄ GE₆ 1 USAN AN e MAŠ-MAŠ šá [SIPA nn mm]
 6' [GE₆ x US]AN AN SIG MAŠ-MAŠ IGI 3½ KÜŠ GE₆ 23 USAN AN SIG MAŠ-MAŠ ár 2½ KÜŠ [...]

No. 13

Flake

- 1' [...] ..., the 12th, Mercury's first appearance² in the east in Aquarius² [...]
 2' [...] the [x]+19th, Mercury's last appearance in the east in Aquarius; I did not watch. Month XII, the 1st, Mer[cury's first appearance in the west in]
-
- 3' [Year 37,] kings [Antiochus and Seleuc]us; month VI was intercalary. Year 3[8], month III, around [...]
 4' [...] the xth, Saturn's acronychal rising. [..., when Sat]urn [became stationary] to [the west, [...]
 5' [...] x]+11th, Saturn's [...] appearance] in P[isces]
-
- 6' [...] the 25th, [...]
 7' [...] [...]

Date

There are only two years with a month VI₂ in which there were two Seleucid kings: SE 37 and 113. The following year, SE 38 or 114, is the topic of lines 3'-5'. In SE 114, no acronychal rising of Saturn (l. 4') occurred; therefore the text must refer to SE 38. This also fits the traces of the year number. The goal year is 59 years later, SE 97.

The Mercury paragraph (lines 1'-2') seems to fit the appropriate year (SE 51).

No. 14

Obv.

- 1' [...] Month IV, night of the 5th², last part of the night, Saturn was x cubits above γ Geminorum [...]
 2' [...] it became stationary [...] α Geminorum, being ½ cubit back to the west. Month VIII, the 30th, Saturn's acronychal rising. Month XI, around until the 5th, [when] Saturn [became stationary] to the west, [...]
-
- 3' [Year] 26, kings Seleucus and Antiochus. Month III, the 23rd, Mars' last appearance in Cancer. Month VI, the 28th, Mars' first appearance in Virgo; [rising of Mars to sunrise:] 17°² [...]
-
- 4' [Year] 58, king Antiochus. Month I, night of the 19th, first part of the night, Mars was [...] above η Geminorum. [...]
 5' [...] Mars was 20 fingers above μ Geminorum. Month II, night of the 1st, first part of the night, Mars was [...] above γ Geminorum [...]
 6' [Night of the xth, first] part of the night, Mars was 3½ cubits below α Geminorum. Night of the 23rd, first part of the night, Mars was 2½ cubits below β Geminorum [...]

- 7' 'e' [S]A₄ šá ABSIN 1 5/6 KÜŠ APIN GE₆ 20 ina ZÁLAG AN e RÍN šá ULÛ ½ K[ÜŠ
GE₆ x ina ZÁLAG AN SIG]
8' RÍ[N šá S]I 2½ KÜŠ GAN GE₆ 13 ina ZÁLAG AN e MÚL e šá SAG GÍR-TAB 5' [...]
9' e [SI₄ x]+½ KÜŠ AB GE₆ 8 ina ZÁLAG AN e MÚL KUR šá KIR₄ šil PA 5/6 KÜ[Š
GE₆ x ina ZÁLAG AN SIG SI]
10' MÁŠ 2½ [KÜŠ] ŠE-DIR GE₆ 7 ina ZÁLAG AN e MÚL 'IGI šá SUḪUR MÁŠ' ½
[KÜŠ]

Rev.

I

- 1 [M]U-1,26-KAM ¹Se LUGAL
2 DU₆ 12,20 ŠÚ u na
3 10 ME u GE₆
4 APIN 13,40 ŠÚ u na
5 11 ME u GE₆
6 GAN 12,40 ŠÚ u na
7 12,50 ME u GE₆
8 AB 9,40 ŠÚ u na
9 10,40 ME u GE₆
10 ZÍZ 10,30 ŠÚ u na
11 'x+30' 'ME' u GE₆
12 [ŠE x ŠÚ u] 'na'

II

- 1 SIG 1 22 KUR₄ 'muš'
2 14 8,30 ME muš
3 14 3,30 ŠÚ
4 15 4 GE₆
5 15 10 UŠ na muš
6 27 17
7 ŠU 30 11 ma-diš SIG [...]
8 14 7 ŠÚ [...]
9 15 2 ME a-kam m[uš]
10 15 9 na m[uš]
11 16 10+[x GE₆]
12 '27' 20+[x]
13 [IZ]I 1 20' 'kí' [PAP NU IGI?]
14 [x] 'x x' [...]

Left edge

- 1 [... ¹An-ti-u-u]k-su A^{meš sic} LUGAL

Comments

Left edge: this should read: kings Antiochus and Antiochus, his son.

- 7' [Mars was] 1 5/6 cubits above α Virginis. Month VIII, night of the 20th, last part of the
night, Mars was ½ cubit above α Librae. [Night of the xth, last part of the night, Mars
was]
8' 2½ cubits [below] β Librae. Month IX, night of the 13th, last part of the night, Mars
was 6 [fingers] above β Scorpī [...]
9' [x]½ cubits above [α Scorpī.] Month X, night of the 8th, last part of the night, Mars
was 5/6 cubit above θ Ophiuchi. [Night of the xth, last part of the night, Mars was]
10' 2½ cubits [below β] Capricorni. Month XII₂, night of the 7th, last part of the night,
Mars was ½ [cubit] above γ Capricorni [...]

Rev.

I

- 1 Year 86, king Seleucus.
2 Month VII, 'moonset to sunrise' plus 'sunrise to moonset': 12° 20'.
3 'moonrise to sunset' plus 'sunset to moonrise': 10°.
4 Month VIII, 'moonset to sunrise' plus 'sunrise to moonset': 13° 40'.
5 'moonrise to sunset' plus 'sunset to moonrise': 11°.
6 Month IX, 'moonset to sunrise' plus 'sunrise to moonset': 12° 40'.
7 'moonrise to sunset' plus 'sunset to moonrise': 12° 50'.
8 Month X, 'moonset to sunrise' plus 'sunrise to moonset': 9° 40'.
9 'moonrise to sunset' plus 'sunset to moonrise': 10° 40'.
10 Month XI, 'moonset to sunrise' plus 'sunrise to moonset': 10° 30'.
11 'moonrise to sunset' plus 'sunset to moonrise': x+30'.
12 [Month XII, 'moonset to sunrise' plus] 'sunrise to moonset': [...]

II

- 1 Month III, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)
22°; it was bright, measured.
2 The 14th, moonrise to sunset: 8° 30'; measured.
3 The 14th, moonset to sunrise: 3° 30'.
4 The 15th, sunset to moonrise: 4°.
5 The 15th, sunrise to moonset: 10°; measured.
6 The 27th, (moonrise to sunrise:) 17°.
7 Month IV, (the 1st of which was identical with) the 30th (of the preceding month, sunset
to moonset:) 11°; it was very faint, [...]
8 The 14th, moonset to sunrise: 7°; [...]
9 The 15th, moonrise to sunset: 2°; measured (despite) mist.
10 The 15th, sunrise to moonset: 9°; mea[sured.]
11 The 16th, [sunset to moonrise:] 10+[x°]
12 The 27th, (moonrise to sunrise:) 20+[x°.]
13 Month V, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)
20°?, when [I watched I did not see it?].
14 [...]

Left edge

- 1 [... king [... and Antio]chus, his son.

No. 15

BM 32443 (= S+ 76-11-17, 2179) + 34894 + 35386 (= Sp II 405 + 968)

Copy: LBA 1232 (34894), 1233 (35386); 32443 is listed as LBA *1231

Photo: Pl. 13f.

Goal year: SE 106

Upper edge

3 *ina a-mat* ^dEN *u* ^dGAŠAN-*ia liš-lim*

Oby.

- 1 MU-34-KAM ŠE DIR MU-35-KAM ¹An-ti-²u-uk-su *u* ¹S[e-lu-ku LUGAL^{meš} GU₄ 9
[MÚL-BABBAR *ina* MAŠ-MAŠ ŠÚ SIG x]
- 2 MÚL-BABBAR *ina* MAŠ-MAŠ IGI 12 *na-su in* 8 IGI [... (in) EN x] MÚL-BABBAR
ana NIM *ki* UŠ-[ú]
- 3 šá ALLA UŠ GAN 8 MÚL-BABBAR *ana* ME E-¹a¹ [... (in) EN x MÚL-BABBAR]
¹ana¹ ŠÚ *ki* UŠ-a ½ KÙŠ *ina* I[GI MAŠ-MAŠ ár UŠ]
- 4 MU-23-KAM ¹Se-lu-ku *u* ¹An-ti-²u-uk-su LUGAL^{meš} BAR GE₆ 21 USAN MÚL-
[BABBAR *e šur* GIGIR šá ULÜ nn mm]
- 5 IZI GE₆ 6 *ina* ZÁLAG MÚL-BABBAR SIG MAŠ-MAŠ IGI 4+[x KÙŠ KIN] GE₆ 15
ina ZÁLAG MÚL-BABBAR SIG [MAŠ-MAŠ ár MÚL-BABBAR]
- 6 *ana* ŠÚ *ina* LAL-šú SIG MAŠ-MAŠ ár 3 KÙŠ AB GE₆ 10+[x USAN¹ MÚ]L-BABBAR
SIG MAŠ-MAŠ IGI '5 KÙŠ' [... MÚL-BABBAR]
- 7 SIG MAŠ-MAŠ IGI 3 KÙŠ ŠE DIR
- 8 MU-1,38-KAM ¹An-ti-²u-uk-su LUGAL BAR GE₆ [x *ina* ZÁLAG *dele-bat*] 'SIG' [MÚL
KUR šá DUR *nu-nu* nn mm GE₆ x *ina* ZÁLAG *dele-bat*]
- 9 SIG MÚL IGI šá SAG HUN 5 KÙŠ GU₄ GE₆ 4 *ina* ZÁLAG *dele-bat* SIG [MÚL ár šá
SAG HUN nn mm]
- 10 SIG GE₆ 2 *ina* ZÁLAG *dele-bat e is* le₁₀ 2 KÙŠ GE₆ 12 *ina* ZÁLAG [*dele-bat* SIG *šur*
GIGIR šá SI nn mm]
- 11 GE₆ 23 *ina* ZÁLAG *dele-bat e* MÚL IGI šá *še-pit* MAŠ-MAŠ 2 SI GE₆ 25 [*ina* ZÁLAG
dele-bat x MÚL ár šá *še-pit* MAŠ-MAŠ nn mm]
- 12 ŠU GE₆ 6 *ina* ZÁLAG *dele-bat* SIG MAŠ-MAŠ IGI 4 KÙŠ GE₆ 10 *ina* ZÁLAG *dele-bat*
SIG MAŠ-M[AŠ ár nn mm]
- 13 [SIG SA]G 'A 5¹ [KÙŠ] 'GE₆ 10¹ *ina* ZÁLAG *dele-bat e* LUGAL 3 SI GE₆ 16¹ [*ina*
ZÁLAG *dele-bat e* MÚL TUR šá 4 KÙŠ ár LUGAL nn mm]
- 14 [... 'x' ZIZ GE₆ 22 USAN *dele-bat* SIG MÚL KUR šá DUR *nu-nu* nn mm]
- 15 [... 'x' [... US]AN *dele-bat* SIG MÚL-[MÚL nn mm]
- 16 [*dele-bat e is* le₁₀ '3' KÙŠ
- 17 [MU]-1-šú-KAM ¹An-ti-²u-uk-su LUGAL BAR 2 GU₄-UD *ina* NIM [...]
- 18 [GE₆] 27 USAN GU₄-UD SIG MAŠ-MAŠ ár 2½ KÙŠ SIG GE₆ 6 U[AN GU₄-UD]
- 19 [GE₆ x]+3 USAN GU₄-UD SIG LUGAL 5/6 KÙŠ ŠU 4 GU₄-UD *ina* 'ŠÚ' [*ina* A ŠÚ
GU₄-UD]

No. 15

Upper edge

3 At the command of Bel and Beltija may it go well.

Oby.

- 1 Year 34: month XII was intercalary. Year 35, kings Ant[iochus and] Seleucus. Month II,
the 9th, [Jupiter's last appearance in Gemini. Month III, the xth,]
- 2 Jupiter's first appearance in Gemini; rising of Jupiter to sunrise: 12°; (ideal) first
appearance on the 8th. [... (Around) until the xth,] when Jupiter became stationary to
the east, [...]
- 3 it became stationary [...] of Cancer. Month IX, the 8th, Jupiter's acronychal rising. [...
(Around) until the xth,] when [Jupiter] became stationary to the west, [it became
stationary] ½ cubit in front [of β Geminorum.]
- 4 Year 23, [kings] Seleucus and Antiochus. Month I, night of the 21st, first part of the
night, Jupi[ter was above ζ Tauri.]
- 5 Month V, night of the 6th, last part of the night, Jupiter was 4+[x cubits] below α
Geminorum. [Month VI,] night of the 15th, last part of the night, Jupiter was [...] below
[β Geminorum Jupiter,]
- 6 while moving back to the west, was 3 cubits below β Geminorum. Month X, night of the
10+[xth, first part of the night¹, Ju]piter was 5 cubits below α Geminorum. [..., Jupiter]
was 3 cubits below α Geminorum. Month XII was intercalary.
- 8 Year 98, king Antiochus. Month I, night [of the xth, last part of the night, Venus] was
[...] below [η Piscium. Night of the xth, last part of the night, Venus]
- 9 was 5 cubits below β Arietis. Month II, night of the 4th, last part of the night, Venus was
[...] below [α Arietis]
- 10 Month III, night of the 2nd, last part of the night, Venus was 2 cubits above α Tauri.
Night of the 12th, last part of the night, [Venus was below β Tauri]
- 11 Night of the 23rd, last part of the night, Venus was 2 fingers above η Geminorum. Night
of the 25th, [last part of the night, Venus was μ Geminorum.]
- 12 Month IV, night of the 6th, last part of the night, Venus was 4 cubits below α Geminorum.
Night of the 10th, last part of the night, Venus was [...] below [β] Geminorum [...]
- 13 5' [cubits below] ε Leonis. Night of the 10th, last part of the night, Venus was 3 fingers
above α Leonis. Night of the 16th¹, [last part of the night, Venus was above ρ Leonis
....]
- 14 [...] Month XI, night of the 22nd, first part of the night, Venus [was below η
Piscium]
- 15 [...] [...] first] part of the night, Venus was [...] below η [Tauri]
- 16 [Venus was] 3 cubits [above α Tau]ri.
- 17 [Year] 60, king Antiochus. Month I, the 2nd, Mercury's [first appearance] in the east [...]
- 18 [Night] of the 27th, first part of the night, Mercury was 2½ cubits below β
Geminorum. Month III, night of the 6th, first [part of the night, Mercury]
- 19 [Night of the x]+3rd, first part of the night, Mercury was 5/6 cubit below α Leonis.
Month IV, the 4th, Mercury's [last appearance] in the west [in Leo Mercury's]

- 20 [ina NI]M ina A ŠÚ DU₆ 11 GU₄-UD ina ŠÚ UD-DA IGI DIB 26 GU₄-UD [....]
 21 [.... x]+10 IGI GAN 27 GU₄-UD ina NIM ina PA ŠÚ AB 29 GU₄-U[D]
 22 [MU]-47-KAM ¹An-ti-²u-uk-su LUGAL GAL-ú u ¹An-ti-³u-[uk-su A-šú]
 23 [.... nn mm] ár MAŠ-MAŠ ár 1 KÙŠ 8 SI ár MÚL-BABBAR i-ša GENNA ana SI N[IM
 IGI]
 24 [ana NIM k]i UŠ-ú 1 KÙŠ ina IGI MÚL^{meš} IGI^{meš} šá ALLA UŠ G[AN x]
 25 [.... ŠE] 4 GENNA ana ŠÚ ki UŠ-a 2 KÙŠ SIG MAŠ-MAŠ ár [....]
 26 [MU-26-KAM ŠE DI]R MU-27-KAM ¹Se-lu-ku u ¹An-ti-²u-u[k-su LUGAL^{meš}]
 27 [.... K]IN 12 AN ana ME E-a DU₆ EN 11+[x]
 28 [MU-58-KAM ŠE DIR MU-59]-KAM ¹An-ti-²u-uk-su LUGAL SI[G GE₆ x]
 29 [....] ¹Š¹U GE₆ 5 ina ZÁLAG AN SIG 'MÚL ár šá' [SAG HUN nn mm]
 30 [....] ¹šur¹ GIGIR šá S[I]
 31 [.... SI]G³ MÚL 'ár¹' [....]

'Rev.'

I

- 1' [x x ME u G]E₆
 2' [ZÍZ x ŠÚ u n]a
 3' [x x ME u] GE₆
 4' [ŠE x ŠÚ] u na
 5' [x x ME] u GE₆
 6' [MU-1,28-KAM ¹Se-l]u-ku LUGAL
 7' [....] sin 5 ÁB BAR
 8' [DIB¹ in x] GE₆ ana ZÁLAG
 9' [.... šam]áš² šá DIB
 10' [in x G]E₆ GI[N]
 11' [....] ¹sin¹
 12'-13' (broken)
 14' GE₆ 'x' [....]
 15' in 1, '11+x' [....]

II

- 1' G[U₄]
 2' 14 4 [ME....]
 3' 14 4,10+[x ŠÚ]
 4' 15 'x' [GE₆]
 5' 15 [.... na]

- 20 last appearance in the east in Leo. Month VII, the 11th, Mercury's first appearance in the west, omitted. The 26th, Mercury's [....]
 21 [....] (ideal) first appearance [on the x]+10th. Month IX, the 27th, Mercury's last appearance in the east in Sagittarius. Month X, the 29th, Mercury's [....]
 22 [Year] 47, Antiochus great king and [his son] Antiochus [....]
 23 [.... Saturn's first appearance] behind β Geminorum, 1 cubit 8 fingers behind Jupiter, Saturn being a little high to the north [....]
 24 [when Saturn] became stationary [to the east,] it became stationary 1 cubit in front of the front stars of Cancer (η and θ Cancri). Month IX, [the xth,]
 25 [.... Month XII,] the 4th, when Saturn became stationary to the west, [it became stationary] 2 cubits below β Geminorum [....]
 26 [Year 26: month XII was inter]calary. Year 27, [kings] Seleucus and Antiochus [....]
 27 [.... Mon]th VI, the 12th, Mars' acronychal rising. Month VII, until the 11+xth, [....]
 28 [Year 58: month XII was intercalary. Year 59,] king Antiochus. Month III, [night of the xth,]
 29 [....] Month IV, night of the 5th, last part of the night, Mars was [....] below α Arietis [....]
 30 [....] β Tauri [....]
 31 [....] below² the rear star of [....]

'Rev.'

I

- 1' ['moonrise to sunset' plus 'sunset' to moonrise': [....]
 2' [Month XI, 'moonset to sunrise' plus 'sunrise' to moonset':[....]
 3' ['moonrise to sunset' plus 'sunset to moonrise': [....]
 4' [Month XII, 'moonset to sunrise'] plus 'sunrise to moonset':[....]
 5' ['moonrise to sunset'] plus 'sunset to moonrise': [....]
 6' [Year 88,] king Seleucus.
 7' [....] lunar [eclipse], (after) 5 months, BAR,
 8' [omitted². At] before sunrise.
 9' [.... so]lar² [eclipse] which was omitted.
 10' [At] after sunset.
 11' [....] lunar² [eclipse?]
 12'-13' (broken)
 14' Night of the xth, [....]
 15' At 71+x [....]

II

- 1' Mon[th II]
 2' The 14th [moonrise to sunset:] 4° [....]
 3' The 14th [moonset to sunrise:] 4° 10+[x']
 4' The 15th [sunset to moonrise:] [....]
 5' The 15th [sunrise to moonset:]

- 6' 27 10+[x]
 7' SIG 30 [....]
 8' 15² [....]
 9'-17' (broken)
 18' 27 [....]

Upper edge

- 1 U₄-1-KAM IGI-DU₄-A^{meš} DIB-qa^{meš} u AN-KU₁₀^{meš} šá a]-^{na} MU-1-me-6-KAM¹
 [1]^{na} [ti-u-uk-su]
 2 u¹ An-ti-u-uk-su¹ A¹-[šú LUGAL^{meš} kun-nu-u]

No. 16

BM 32495 (=S+ 76-11-17, 2234) (+) 32504 (= S+ 76-11-17, 2244)

Listed as LBAT *1234 (32495)

Photo: Pl. 15f.

Goal year: SE 107

32504 continues obv. 11'-22' of 32495 on the right; on the rev., cols. III and IV are preserved on 32504.

LBAT 1235 and 1236 are not parts of this tablet.

'Obv.'

- 1'-4' are illegible to me;
 5' [....] (blank)
 6' 'MU-24-KAM' x x x 27 USAN' x x x x x x¹ [....]
 7' IZI GE₆ 24 ina ZÁLAG MÚL-BABBAR 'SIG' SAG' A¹ 'x KÙŠ ZÍZ' GE₆ x USAN' [....]
 8' MU-1,39-KAM¹ An-ti-u-uk-su LUGAL BAR GE₆ x USAN' dele-bat SIG šur 'GIGIR'
 [....]
 9' GE₆ 18 USAN dele-bat e MÚL IGI šá še-pit MAŠ-MAŠ 1² KÙŠ 4 SI GE₆ 20² USAN dele-
 bat [e MÚL ár šá še-pit MAŠ-MAŠ nn mm]
 10' GE₆ 23 USAN dele-bat e MAŠ-MAŠ šá SIPA 4² KÙŠ GU₄ GE₆ 'x' USAN dele-bat SIG
 [MAŠ-MAŠ IGI nn mm GE₆ x USAN dele-bat]
 11' SIG MAŠ-MAŠ ár 2½ KÙŠ GE₆ 22² USAN dele-bat SIG MÚL ár šá ALLA šá UL[^U nn
 mm SIG GE₆ x U]SAN dele-bat SIG S[AG A nn mm]
 12' GE₆ 13 USAN dele-bat e LUGAL ½ KÙŠ GE₆ 22 USAN dele-bat e MÚL T[UR šá 4 KÙŠ
 ár LUGAL] 'x x ŠU GE₆ 7 USAN' dele-bat
 13' SIG GIŠ.KUN A 5² KÙŠ IZI 4 11 na šá dele-bat in 7² dele-bat ina Š[^U ina A² ŠÚ x] dele-bat
 ina NIM ina A IGI KUR NIM-a 'x' [na-su]
 14' in 22 u ki-i 23 IGI KIN GE₆ [x] ina ZÁLAG dele-bat SIG MÚL TUR šá [x (x) DU₆ GE₆]
 17 ina ZÁLAG dele-bat e GÌR ár šá A [nn mm]
 15' APIN GE₆ 2 ina ZÁLAG dele-bat SIG DELE šá IGI ABSIN [nn mm] GE₆ 15² ina ZÁLAG
 dele-bat e S[A₄ šá] ABSIN 1½ KÙŠ GAN GE₆ 3 ina ZÁLAG dele-bat



- 6' The 27th [moonrise to sunrise:] 10+[x°]
 7' Month III, (the 1st of which was identical with) the 30th (of the preceding month,
 sunset to moonset:) [....]
 8' The 15th¹ [....]
 9'-17' (broken)
 18' The 27th [....]

Upper edge

- 1 First days, appearances, passings, [and eclipses which were established] for year 106,
 [kings] An[tiochus]
 2 and his son Antiochus.

No. 16

'Obv.'

- 1'-4' (illegible)
 5' [....] (blank)
 6' Year 24², Night² of the 27th, first part of the night². [....]
 7' Month V, night of the 24th, last part of the night, Jupiter was cubits below ε Leonis.
 Month XI, night of the xth, first part of the night, [....]
 8' Year 99, king Antiochus. Month I, night of the xth, first part of the night, Venus was
 [....] below [β/ζ] Tauri [....]
 9' Night of the 18th, first part of the night, Venus was 1² cubit 4 fingers above η Geminorum.
 Night of the 20th², first part of the night, Venus [was above μ Geminorum.]
 10' Night of the 23rd, first part of the night, Venus was 4² cubits above γ Geminorum. Night
 of the xth, first part of the night, Venus was [....] below [α Geminorum. Night of the xth,
 first part of the night, Venus was]
 11' 2½ cubits below β Geminorum. Night of the 22nd², first part of the night, Venus was
 [....] below δ Scorpii. [Month III, night of the xth, first] part of the night, Venus was [....]
 below [ε Leonis.]
 12' Night of the 13th, first part of the night, Venus was ½ cubit above α Leonis. Night of
 the 22nd, first part of the night, Venus was [....] above ρ [Leonis.] Month IV, night of the
 7th, first part of the night, Venus was
 13' 5² cubits below θ Leonis. Month V, night of the 4th, sunset to setting of Venus: 11°. Around the 7th², Venus' [last appearance] in the west [in Leo². The xth,] Venus' first appearance in the east in Leo; it was bright (and) high, [rising of Venus to sunrise:]
 14' (ideal) first appearance on the 22nd or on the 23rd. Month VI, night of the [xth,] last part of the night, Venus was [....] below [Month VII, ni]ght of the 17th, last part of the night, Venus was [....] above β Virginis [....]
 15' Month VIII, night of the 2nd, last part of the night, Venus was [....] below γ Virginis. Night of the 15th², last part of the night, Venus was 1½ cubits above α Virginis. Month IX, night of the 3rd, last part of the night, Venus was

- 16' *e* RÍN šá ULÙ 5/6' KÙŠ GE₆ 8' ina ZÁLAG *dele-bat* SIG RÍN šá SI [nn mm] 'GE₆ x' [ina ZÁLAG *dele*]-bat *e* MÚL MURUB₄ šá SAG GÍR-TAB ½ KÙŠ GE₆ 'x' 17' GE₆ 24' ina ZÁLAG *dele-bat* *e* SI₄ 2' KÙŠ AB GE₆ 'x' ina ZÁLAG *dele-bat* *e* MÚL [KUR] šá KIR₄ šil PA ½ KÙŠ 8 SI ZÍZ GE₆ 11 [ina ZÁLAG² *dele-bat*] 18' SIG SI MÁŠ ½' KÙŠ GE₆ 25' ina ZÁLAG *dele-bat* *e* MÚL IGI šá SUḪUR MÁ[Š 1] KÙŠ 8 SI GE₆ 26 ina ZÁLAG *dele-bat* 19' 'e' MÚL ár šá SUḪUR MÁŠ 1 KÙŠ 10 SI DIR-<ŠE> 29 7 na šá [*dele*]-bat ŠE DIR :: MU-1-40-KAM BAR in 1 'dele-bat' [ina NIM ina x ŠÚ]
- 20' [MU-1-šu-1-KA]M ¹An-ti-²u-uk-su LUGAL BAR 9' GU₄-UD ina NIM 'ina' [x ŠÚ] GU₄ 16 GU₄-UD ina ŠÚ ina MAŠ-MAŠ IG[F³] 21' [... G]U₄-UD SIG MAŠ-MAŠ ár 2 ½ KÙŠ SIG 30 [GU₄-UD ina ŠÚ ina] ALLA ŠÚ ŠU 24 GU₄-UD ina [NIM ina x IGI] 22' [... 'ina A' ŠÚ' DU₆ 5 GU₄-UD [ina ŠÚ ina x IGI] GU₄-UD 'ina ŠÚ x x' [...] 23' [... 'GE₆ 25' ina ZÁLAG¹ [...] 24' [... 'x x' [...]

'Rev.'

- 1' [... AN *e* MÚL MU[RUB₄ šá SAG GÍR-TAB] 2' [... AN *e* MÚL IGI šá SUḪUR] 'MÁŠ¹ ½ KÙŠ ŠE GE₆ 3 ina ZÁ[LAG AN *e* MÚL ár šá SUḪUR MÁŠ]

I

- 3' [MU-1,2]8-KAM ¹Se-lu-ku LUGAL 4' [DU₆] 16,50 ŠÚ u na 5' 11,20' ME u GE₆ 6' APIN 17,10 ŠÚ u na 7' 13²,50 ME u GE₆ 8' GAN 16,30 ŠÚ u na 9' 14,20 ME u GE₆ 10' AB 11,50 ŠÚ u na 11' 15,30 ME u GE₆ 12' ZÍZ 10,50 ŠÚ u na 13' 16²,10 ME u GE₆ 14' ŠE 7,10 ŠÚ u na 15' 13,40' ME u GE₆

- 16' 5/6' cubits above α Librae. Night of the 8th¹, last part of the night, Venus was [...] below β Librae. Night of the xth, [last part of the night, Ve]nus was ½ cubit above δ Scorpii. Night of the xth, 17' Night of the 24th¹, last part of the night, Venus was 2' cubits above α Scorpii. Month X, night of the xth, last part of the night, Venus was ½ cubit 8 fingers above θ Ophiuchi. Month XI, night of the 11th, [last part of the night, Venus was] 18' ½ cubit below β Capricorni. Night of the 25th¹, last part of the night, Venus was [1] cubit 8 fingers above γ Capricorni. Night of the 26th, last part of the night, Venus was 19' 1 cubit 10 fingers above δ Capricorni. Month XII₂, the 29th, rising of Venus to sunrise: 7°. Month XII was intercalary. :: Year 100, month I, around the 1st, Venus' [last appearance in the east in]
- 20' [Year 61.] king Antiochus. Month I, the 9th, Mercury's [last appearance] in the east in [...] Month II, the 16th, Mercury's first¹ appearance in the west in Gemini [...] 21' [...] Mercury was 2½ cubits below β Geminorum. Month III, the 30th, [Mercury's last appearance [in the west in] Cancer. Month IV, the 24th, Mercury's [first appearance] in [the east in] 22' [...] last appearance [in the east] in Leo². Month VII, the 5th, Mercury's [first appearance in the west in] Mercury's [last appearance] in the west [...] 23' [...] night² of the 25th¹, last part of the night², [...] 24' [...] [...]

'Rev.'

- 1' [...] Mars was above δ² [Scorpii] 2' [...] Mars was] ½ cubit [above γ Capri]corni. Month XII, night of the 3rd, last [part of the night, Mars was above δ Capricorni.]

I

- 3' [Year 8]8, king Seleucus. 4' [Month VII,] 'moonset to sunrise' plus 'sunrise to moonset': 16° 50' 5' 'moonrise to sunset' plus 'sunset to moonrise': 11° 20'² 6' Month VIII, 'moonset to sunrise' plus 'sunrise to moonset': 17° 10' 7' 'moonrise to sunset' plus 'sunset to moonrise': 13° 50' 8' Month IX, 'moonset to sunrise' plus 'sunrise to moonset': 16° 30' 9' 'moonrise to sunset' plus 'sunset to moonrise': 14° 20' 10' Month X, 'moonset to sunrise' plus 'sunrise to moonset': 11° 50' 11' 'moonrise to sunset' plus 'sunset to moonrise': 15° 30' 12' Month XI, 'moonset to sunrise' plus 'sunrise to moonset': 10° 50' 13' 'moonrise to sunset' plus 'sunset to moonrise': 16° 10' 14' Month XII, 'moonset to sunrise' plus 'sunrise to moonset': 7° 10' 15' 'moonrise to sunset' plus 'sunset to moonrise': 13° 40'²

- 16' [MU]-1,29-KAM ¹Se-lu-ku 'LUGAL'
 17' [GU₄] 14 'x x x x'
 18' [...] 'x' 3' x x x
 19' [...] 'x x' 21'
 20' [...] 'x'
 21' [...] (blank)
 22' [...] NU PAP'

II

- 3' MU-1,29-K[AM]
 4' BAR 30 20 KUR₄ a-pir muš
 5' 13 7 ŠÚ
 6' 14 50 NINDA ME muš
 7' 14 30 NINDA na [...]
 8' 15 11,50 GE₆ [...]
 9' 27 18,30¹ KUR¹ [...]
 10' GU₄ 30 14,20¹ 'x x' [...]
 11' 14 10,30 ME [...]
 12' 14 3,50 ŠÚ [...]
 13' 15 4,40² [GE₆]
 14' 15 6² n[a]
 15' 20+[x][....]
 16'-18' [...]
 19' '14² x,20² [...]
 20' '15² 7²,40² G[E₆]
 21' 27+'x'x' [...] [
 22' ŠU [...]

III

- 1' [...] 'x'
 2' [...] a-pi]r² muš ana šámaš SIG
 3' [...] ŠÚ²
 4' [...] x],30 ME muš
 5' [...] x]+1,40 na 'muš'
 6' [...] 'x' GE₆ 'muš'¹
 7' [...] +12¹ muš
 8' [...] 30 a-pir² DIR NU PAP
 9' [...] 'x' ŠÚ
 10' [...] 'x' ME muš
 11' [...] 'na' muš

IV

- 1' '27¹ [...]
 2' AB 1 [...]
 3' 13 [...]

- 16' [Year] 89, king Seleucus.
 17' [Month II,] the 14th,
 18' [...] 3¹
 19' [...] 21'
 20' [...]
 21' [...] (blank)
 22' [...] I did not watch¹.

II

- 3' Year 89, [...]
 4' Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 20°; it was bright, earthshine, measured.
 5' The 13th, moonset to sunrise: 7°.
 6' The 14th, moonrise to sunset: 50', measured.
 7' The 14th, sunrise to moonset: 30', [...]
 8' The 15th, sunset to moonrise: 11° 50' [...]
 9' The 27th, moonrise to sunrise: 18° 30'² [...]
 10' Month II, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 14° 20'² [...]
 11' The 14th, moonrise to sunset: 10° 30' [...]
 12' The 14th, moonset to sunrise: 3° 50' [...]
 13' The 15th, [sunset to moonrise:] 4° 40'² [...]
 14' The 15th, sunrise to moonset: 6°² [...]
 15' The 20+[xth,]
 16'-18' [...]
 19' The 14th¹, [...] x° 20'² [...]
 20' The 15th, sunset to moonrise: 7°² 40'² [...]
 21' The 27+xth, [...]
 22' Month IV, [...]

III

- 1' [...]
 2' [...] earth]shine², measured; it was low to the sun.
 3' [...] moonset to sunrise: [...]
 4' [...] moonrise to sunset: [x°] 30', measured.
 5' [...] sunrise to moonset: [x]+1°, measured.
 6' [...] sunset to moonrise:, measured.
 7' [...] x]+12°, measured.
 8' [MN,] (sunset to moonset:) [...] 30'; earthshine; clouds, I did not watch.
 9' [...] moonset to sunrise:
 10' [...] moonrise to sunset:, measured.
 11' [...] sunrise to moonset: [...], measured.

IV

- 1' The 27th, [...]
 2' Month X, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) [...]
 3' The 13th, [moonrise to sunset:]

- 4' 13 [....]
 5' 14 2+[x]
 6' 14 15 [....]
 7' 28² 10+[x]

Left edge

- 1 [U₄-1-KAM IGI-DUH]-A^{meš} DIB-qa^{meš} u AN-KU₁₀^{meš} šá a-na MU-1-me-7-KAM ¹An¹-
 [ti-u-uk-su u ¹An-ti-u-uk-su (A-šú) LUGAL^{meš} kun-nu-u]

Comments

Rev. 1': since line 2' contains Mars' passing of γ and δ Capricorni, this line must refer to a somewhat earlier passing. The traces seem to fit MÚL MURUB₄ (δ Scorpii) better than MÚL KUR šá KIR₄ šil PA (θ Ophiuchi).

I 17: lunar eclipse of -222 May 31.

No. 17

BM 35181 (= Sp II 734)

Copy: LBAT 1235

Photo: Pl. 16

Goal year: SE 107

Probably not same tablet as No. 16.

'Obv.'

- 1' [....] 'x' 4 SI ár 'LUGAL UŠ AB 20 MÚL²-BABBAR¹ [ana ME E-a]
 2' [....] ina IGI SAG A UŠ
 3' [MU-24-KAM ¹Se-lu-ku u ¹An-ti-u]-'uk¹-su LUGAL^{meš} ita¹BAR GE₆ 18 USAN MÚL-
 BA[BAR]
 4' [....] USAN MÚL-BABBAR ana ŠÚ ina LAL-šú SIG SAG [A nn mm]
 5' [....] KÙŠ² GE₆ 11 USAN [dele-bat]
 6' [....] 'x x x' [....]

'Rev.'

I and II broken;

III

- 1' [APIN x x],30 DIR NU PAP
 2' '13' 2,50 ŠÚ
 3' 14 3,30 ME muš
 4' 14 12,30 na muš
 5' 15 8,40 GE₆
 6' 26 20 muš
 7' [G]AN 30 10,30 DIR NU PAP

- 4' The 13th, [moonset to sunrise:]
 5' The 14th, [sunset to moonrise:] 2+[x°,]
 6' The 14th, [sunrise to moonset:] 15° [....]
 7' The 28th¹, [moonrise to sunrise:] 10+[x°,]

Left edge

- 1 [First days, appear]ances, passings and eclipses which [were established] for year 107,
 [kings] An[tiochus and (his son) Antiochus.]

No. 17

'Obv.'

- 1' [....] it became stationary [....] 4 fingers behind α Leonis. Month X, the 20th, Jupiter's
 [acrionychal rising]
 2' [....] it became stationary [....] in front of ϵ Leonis.
 3' [Year 24,] kings [Seleucus and Antio]chus. Month I, night of the 18th, first part of the
 night, Jupit[er was]
 4' [....] first part of the night, Jupiter, while moving back to the west, was [....] below ϵ
 Leonis.
 5' [....] cubits². Night of the 11th, first part of the night, [....]
 6' [....] [....]

'Rev.'

I and II broken;

III

- 1' [Month VIII, ..., sunset to moonset: x°] 30'; clouds, I did not watch.
 2' The 13th, moonset to sunrise: 2° 50'.
 3' The 14th, moonrise to sunset: 3° 30'; measured.
 4' The 14th, sunrise to moonset: 12° 30'; measured.
 5' The 15th, sunset to moonrise: 8° 40'.
 6' The 26th, (moonrise to sunrise:) 20°; measured.
 7' Month IX, (the 1st of which was identical with) the 30th (of the preceding month, sunset
 to moonset:) 10° 30'; clouds, I did not watch.

IV

- 1' 28 10,50 DIR N[U PAP]
 2' DIR 1 24 KUR₄ DIR *muš*
 3' 12 10+[x],30² ŠÚ DIR NU PAP
 4' '13' [x ME x] NU PAP
 5' 1[3 x na] *muš*
 6' 14 11² GE₆ 'DIR' *muš*²¹
 7' 26+[x][x],40² DIR NU PAP

No. 18

BM 41527 (= 81-6-25, 141)

Copy: LBAT 1236

Photo: Pl. 17

Goal year: SE 107

'Obv.

- 1' [...] 'x' ZÍZ 18 GU₄-[UD]
 2' [...] 'x x x'
 3' [MU-48-KAM ¹An-ti-²u-uk]-su LUGAL GAL-ú u ¹An-ti-²u-uk-su A-šú LUGAL
 4' [...] 'x ina' ALLA IGI DU₆ in EN 24 GENNA ana NIM ki UŠ-[ú]
 5' [...] UŠ GAN in 18 GENNA ana ME E-a ZÍZ GE₆ 10 USAN GENNA
 6' [e MÚL ár šá ALLA šá UL]Ú 1 SI ŠE in EN 26 GENNA ana ŠÚ ki UŠ-a
 7' [...] 'x' ana SI NIM UŠ ŠE GE₆ 26 USAN GENNA
 8' [e MÚL ár šá ALLA šá UL]Ú 2 SI i-ša GENNA ana NIM DIB

Rev.

- 1 [...] ITU' in 18² AN ina A ŠÚ DU₆ 23 AN ina RÍN IGI 18 na ina 19² IGI
 2 [...] USA]N AN e MÚL IGI šá še-pit MAŠ-MAŠ 5/6 KÚŠ GE₆ 23² 'USAN AN'
 3 [e MÚL ár šá še-pit MAŠ-MAŠ nn mm AN e MAŠ-MAŠ] 'šá SIPA' 4 KÚŠ GE₆ 17
 USAN AN SIG MAŠ-MAŠ IGI 2 [KÚŠ]
 4 [...] AN e MÚL ár šá ALLA] šá ULÚ 14 'SI' GE₆ 22
 5 [AN e MÚL-BABBAR nn mm] GE₆ 25 USAN AN e LUGAL [nn mm]
 6 [...] ZÍZ GE₆ 11 ina ZALÁG AN [(x)]
 7 [...] 'x x' [...]

Comments

Rev. 2: these positions were reached by Mars already in month XII of year 59; Mars passed γ Geminorum just at the beginning of year 60.

4: On the 22nd of month II, Mars passed Jupiter, which was to the east of δ Cancri.

5: Mars' passing of α Leonis occurred in month III.

IV

- 1' The 28th, (moonrise to sunrise:) 10° 50'; clouds, I did not [watch.]
 2' Month XII₂, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 24°; it was bright, measured (despite) clouds.
 3' The 12th, moonset to sunrise: 10+[x°] 30'²; clouds, I did not watch.
 4' The 13th, [moonrise to sunset:] I did not watch.
 5' The 1[3th, sunrise to moonset:] measured.
 6' The 14th, sunset to moonrise: 11°²; measured² (despite) clouds².
 7' The 26+[xth,] (moonrise to sunrise:) [x°] 40'²; clouds, I did not watch.

No. 18

'Obv.

- 1' [...] Month XI, the 18th, Mer[cury's]
 2' [...]
 3' [Year 48. Antioch]us was great king and his son Antiochus king.
 4' [...] Saturn's] first appearance in Cancer. Month VII, around until the 24th, when Saturn became stationary to the east,
 5' it became [stationary] Month IX, around the 18th, Saturn's acronychal rising. Month XI, night of the 10th, first part of the night, Saturn was
 6' 1 finger [above δ Canc]ri. Month XII, around until the 26th, when Saturn became stationary to the west,
 7' it became stationary [...] high to the north. Month XII, night of the 26th, first part of the night, Saturn was
 8' 2 fingers [above δ Canc]ri], Saturn having passed a little to the east.

Rev.

- 1' [...] Around the 18th, Mars' last appearance in Leo. Month VII, the 23rd, Mars' first appearance in Libra; rising of Mars to sunrise: 18°; (ideal) first appearance on the 19th².
 2 [.... first part of the ni]ght, Mars was 5/6 cubit above η Geminorum. Night of the 23rd², first part of the night, Mars was
 3 [.... above μ Geminorum Mars was] 4 cubits [above γ Ge]minorum. Night of the 17th, first part of the night, Mars was 2 [cubits] below α Geminorum.
 4 [.... Mars was] 14 fingers [above δ] Canc]ri. Night of the 22nd,
 5 [Mars was above Jupiter] Night of the 25th, first part of the night, Mars was [....] above α Leonis.
 6 [...] Month XI, night of the 11th, last part of the night, Mars was
 7 [...] [...]

No. 19

BM 34849 (= Sp II 352)

Copy: LBAT 1367

Goal year: SE 107 or 108 or both (LBAT p. xxvii)

Upper edge

1 ŠU 1 GENNA ina ALLA IGI 15,30 na-su

Obv.:

- 1 [... i]n 28 GENNA ina ALLA ŠÚ SIG in 29 GENNA ina ALLA IGI DU₆ in EN 24
 2 [GENNA ana NIM ki UŠ-ú] 2' KÙŠár MÚL ár šá ALLA šá ULÙ UŠ GAN in 18 GENNA ana ME E-a
 3 [ZÍZ GE₆ x USAN GENNA ana ŠÚ] ina LAL-šú e MÚL ár šá ALLA šá ULÙ 2 SI DIM₄ in EN 26
 4 [GENNA ana ŠÚ ki UŠ]-^ra^r 2 SI ina IGI MÚL ár šá ALLA šá ULÙ 2 SI ana SI NIM ^rUŠ^r
 5 [ŠE GE₆ x US]AN GENNA ana NIM ina LAL-šú e MÚL ár šá ALLA šá ^rULÙ^r [nn mm]
 6 [...]^rx^r [...]

'Rev.

- 1' [...]^rx^r [...]
 2' GE₆ 13 USAN AN ^re^r [...]
 3' GE₆ 22 USAN AN e MAŠ-MAŠ šá SIPA '4' [(x) KÙŠ]
 4' DIR GE₆ 13 USAN AN SIG MAŠ-MAŠ IGI 3½ KÙŠ
 5' GE₆ 22 USAN AN SIG MAŠ-MAŠ ár 2½ KÙŠ
 6' ŠE DIR

Comments

The Saturn section is for SE 48 (LBAT erroneously has 49) and the Mars section for SE 61. The tablet may have contained data for two years, SE 48 and 49 for Saturn and 60 and 61 for Mars, leading to goal-years SE 107 and 108. The end of the Saturn section and the beginning of the Mars section are lost. Such a tablet would more properly have belonged in volume V.

No. 19

Upper edge

- 1 Month IV, the 1st, Saturn's first appearance in Cancer; rising of Saturn to sunrise: 15° 30'.

Obv.:

- 1 [... Ar]ound the 28th, Saturn's last appearance in Cancer. Month III, around the 29th, Saturn's first appearance in Cancer. Month VII, around until the 24th,
 2 [when Saturn became stationary to the east, it] became stationary 2' cubits behind δ Cancri. Month IX, around the 18th, Saturn's acronychal rising.
 3 [Month XI, night of the xth, first part of the night, Saturn,] while moving back [to the west,] was 2 fingers above δ Cancri; it came near. Around until the 26th,
 4 [when Saturn became stationary to the west,] it became stationary 2 fingers in front of δ Cancri, being 2 fingers high to the north.
 5 [Month XII, night of the xth, first] part of the night, Saturn, while moving back to the east, was [...] above δ Cancri.
 6 [...] ... [...]

'Rev.

- 1' [...] ... [...]
 2' Night of the 13th, first part of the night, Mars was [...] above^r [...]
 3' Night of the 22nd, first part of the night, Mars was 4 [cubits (...)] above γ Geminorum.
 4' Month XII₂, night of the 13th, first part of the night, Mars was 3½ cubits below α Geminorum.
 5' Night of the 22nd, first part of the night, Mars was 2½ cubits below β Geminorum.
 6' Month XII was intercalary.

No. 20

BM 32222 (= S+ 76-11-17, 1949+2048+2329)

Copy: Strassmaier, ZA 6 (1891) 231-233 (S+ 76-11-17, 1949); listed as LBAT (**)1237.

Photo: Pl. 18f.

Bibliography: Epping and Strassmaier, ZA 6 (1891) 89-101; Pingree, Astral Sciences (1999) 169f.

Goal Year: SE 118

Obv.

- 1 [MU-47-KAM] ¹An-ti-u-ku-su u ¹An MIN A-šú LUGAL^{meš} GU₄ 25 MÚL-BABBAR
ina MAŠ-MAŠ ŠÚ NU PAP SIG 24 MÚL-[BABBAR] ¹ina² ALLA¹ [nn mm]
- 2 á[r dele-bat ana NI]M GUB IGI 11,30 na-su in 23 IGI DU₆ EN 26 MÚL-BABBAR ana
NIM ki UŠ-[ú]
- 3 'x' [...] 'x'^{meš} šá ALLA a-na SIG TAR KUR i-ša MÚL-BABBAR ana ŠÚ LAL UŠ
GAN 24 MÚL-BABBAR ana ME E-a ZÍZ 20+[x]
- 4 [M]ÚL-BABBAR ¹ana ŠÚ ki¹ UŠ-a 2½ KÙŠ SIG MAŠ-MAŠ á*r* i-ša MÚL-BABBAR
ana NIM DIB UŠ ŠE DIR
- 5 'MU'-34-KAM ¹An-ti-u-ku-su u ¹Se-lu-ku LUGAL^{meš} DIR-ŠE GE₆ 22 USAN MÚL-
BABBAR e šur GIGIR šá ULÙ ½ KÙŠ
- 6 MU-3[5-K]AM ¹An-ti-u-ku-su u ¹Se-lu-ku LUGAL^{meš} ŠU GE₆ 8¹ ina ZÁLAG MÚL-
BABBAR SIG MAŠ-MAŠ IGI 4 KÙŠ
- 7 IZI GE₆ 5 ina ZÁLAG MÚL-BABBAR SIG MAŠ-MAŠ <á*r*> 2½ KÙŠ GAN GE₆ 24¹
USAN MÚL-BABBAR ana ŠÚ ina LAL-šú SIG MAŠ-MAŠ á*r* 3 KÙŠ
- 8 MU-36-KAM BAR GE₆ 1¹ 'USAN MÚL-BABBAR ana NIM ina¹ [LAL-šú] SIG MAŠ-
MAŠ á*r* 2 KÙŠ
- 9 MU-1,50-KAM ¹An-ti-u-ku-su u ¹An A-šú¹ [LUG]AL^{meš} [BAR GE₆ x]+2 'USAN dele-
bat SIG¹ [MÚL-MÚL nn] 'KÙŠ¹
- 10 GE₆ 14 USAN dele-bat e is le₁₀ 2½ KÙŠ GE₆ 23 USAN dele-bat SIG šur GIGIR šá 'SI 2¹
[mm GE₆ x USAN dele-bat]
- 11 e šur GIGIR šá ULÙ 1 KÙŠ GU₄ GE₆ 3 USAN dele-bat e MÚL IGI šá še-pít MAŠ-MAŠ
1 KÙŠ 4 SI GE₆ 5 U[AN dele-bat]
- 12 e MÚL á*r* šá še-pít MAŠ-MAŠ 1 KÙŠ 4 SI GE₆ 8 USAN dele-bat e MAŠ-MAŠ šá SIPA 4
KÙŠ GE₆ 17 USAN dele-bat
- 13 SIG MAŠ-MAŠ IGI 3½ KÙŠ GE₆ 21 USAN dele-bat SIG MAŠ-MAŠ á*r* 2½ KÙŠ SIG
GE₆ 3 USAN dele-bat e MÚL á*r*
- 14 šá ALLA šá ULÙ 2/3 KÙŠ GE₆ 13 USAN dele-bat SIG SAG A 3½ KÙŠ GE₆ 21 USAN
dele-bat e LUGAL 2/3 KÙŠ
- 15 GE₆ 28 USAN dele-bat e MÚL TUR 20 SI dele-bat 4 SI ana NIM DIB ŠU GE₆ 7 USAN
dele-bat SIG GIŠ.KUN A 4½ K[ÙŠ]
- 16 GE₆ 15 USAN dele-bat e GİR á*r* šá A 2 SI GE₆ 28 USAN dele-bat SIG DELE šá IGI
ABSIN 1½ KÙŠ IZI GE₆ 12¹

No. 20

Obv.

- 1 [Year 47,] Antiochus and Antiochus, his son, kings. Month II, the 25th, Jupiter's last
appearance in Gemini; I did not watch. Month III, the 24th, Jupiter's
- 2 first appearance, it stood [in front of Venus to the ea]st; rising of Jupiter to sunrise:
11° 30'; (ideal) first appearance on the 23rd. Month VII, until the 26th, when Jupiter
became stationary to the east,
- 3 it became stationary the stars of Cancer to, Jupiter being a little back to the
west. Month IX, the 24th, Jupiter's acronychal rising. Month XI, the 20+[xth,]
- 4 when Jupiter became stationary to the west, it became stationary 2½ cubits below β
Geminorum. Jupiter having passed a little to the east. Month XII was intercalary.
- 5 Year 34, kings Antiochus and Seleucus. Month XII₂, night of the 22nd, first part of the
night, Jupiter was ½ cubit above ζ Tauri.
- 6 Year 3[5], kings Antiochus and Seleucus. Month IV, night of the 8th¹, last part of the
night, Jupiter was 4 cubits below α Geminorum.
- 7 Month V, night of the 5th, last part of the night, Jupiter was 2½ cubits below <β>
Geminorum. Month IX, night of the 24th¹, first part of the night, Jupiter, while moving
back to the west, was 3 cubits below β Geminorum.
- 8 Year 36. Month I, night of the 1st¹, first part of the night, Jupiter, while moving back to
the east, was 2 cubits below β Geminorum.
- 9 Year 110, kings Antiochus and Antiochus, his son. [Month I, night] of the xth, first part
of the night, Venus was [...] cubits below [η Tauri.]
- 10 Night of the 14th, first part of the night, Venus was 2½ cubits above α Tauri. Night of
the 23rd, first part of the night, Venus was 2 [...] below β Tauri. [Night of the xth, first
part of the night, Venus]
- 11 was 1 cubit above ζ Tauri. Month II, night of the 3rd, first part of the night, Venus was
1 cubit 4 fingers above η Geminorum. Night of the 5th, first [part of the night, Venus]
- 12 was 1 cubit 4 fingers above μ Geminorum. Night of the 8th, first part of the night, Venus
was 4 cubits above γ Geminorum. Night of the 17th, first part of the night, Venus
- 13 was 3½ cubits below α Geminorum. Night of the 21st, first part of the night, Venus was
2½ cubits below β Geminorum. Month III, night of the 3rd, first part of the night,
Venus was 2/3 cubit above δ
- 14 Cancrī. Night of the 13th, first part of the night, Venus was 3½ cubits below ε Leonis.
Night of the 21st, first part of the night, Venus was 2/3 cubits above α Leonis.
- 15 Night of the 28th, first part of the night, Venus was 20 fingers above q Leonis, Venus
having passed 4 fingers to the east. Month IV, night of the 7th, first part of the night,
Venus was 4½ cubits below θ Leonis.
- 16 Night of the 15th, first part of the night, Venus was 2 fingers above β Virginis. Night of
the 28th, first part of the night, Venus was 1½ cubits below γ Virginis. Month V, night of
the 12th¹,
- 17 first part of the night, Venus was 10 fingers above α Virginis. Month VI, night of the 4th,

- 17 USAN *dele-bat e* SA₄ šá ABSIN 10 SI KIN GE₆ 4 USAN *dele-bat* SIG RÍN šá ULÙ 2½
KÜŠ GE₆ 10 USAN *dele-bat*
- 18 S[IG RÍ]N šá SI 5 KÜŠ DU₆ 15 9 *na šá dele-bat ina* 19 *dele-bat ina* ŠÚ *ina* RÍN ŠÚ
APIN 7 *dele-bat ina* NIM *ina* RÍN IGI KUR NIM-a
- 19 '20²¹ *na-su ina* 4 IGI GAN GE₆ 4 *ina* ZÁLAG *dele-bat* SIG RÍN šá SI 2 KÜŠ GE₆ 25 *ina*
ZÁLAG *dele-bat e* MÚL *e* šá SAG GÍR-TAB
- 20 'x' KÜŠ AB GE₆ 2 *ina* ZÁLAG *dele-bat e* SI₄ 2 KÜŠ GE₆ 14 *ina* ZÁLAG *dele-bat e* MÚL
KUR šá KIR₄ šil PA 2 KÜŠ ZÍZ GE₆ 22 *ina* ZÁLAG *dele-bat*
- 21 SIG SI MÁŠ 1½ KÜŠ ŠE GE₆ 9 *ina* ZÁLAG *dele-bat e* MÚL IGI šá SUḪUR MÁŠ 1
KÜŠ 8 SI GE₆ 11 *ina* ZÁLAG *dele-bat e* MÚL ár
- 22 šá SUḪUR MÁŠ 1 KÜŠ 8 SI ŠE DIR
-
- 23 MU-1,12-KAM ¹Se-lu-ku LUGAL BAR 2 GU₄-UD *ina* ŠÚ *ina* ḪUN ŠÚ NU PAP GU₄
14 GU₄-UD *ina* NIM UD-DA IGI DIB 27 GU₄-UD *ina* NIM UD-DA ŠÚ-šú DIB
- 24 SIG 28 GU₄-UD *ina* ŠÚ *ina* ALLA IGI TUR 15 *na-su in* 25 IGI ŠU GE₆ 9 USAN GU₄-
UD *e* LUGAL 6 SI
- 25 IZI 3 GU₄-UD *ina* ŠÚ *ina* A ŠÚ KIN 1 GU₄-UD *ina* NIM *ina* A IGI 17,40 *na-su in* 29
šá IZI IGI 24 GU₄-UD
- 26 *ina* NIM *ina* ABSIN ŠÚ NU PAP APIN 20 GU₄-UD *ina* ŠÚ *ina* PA IGI NU PAP 29
GU₄-UD *ina* ŠÚ *ina* PA ŠÚ NU PAP GAN 17 GU₄-UD *ina* NIM *ina* PA IGI NU PAP
- 27 AB 27 GU₄-UD *ina* NIM *ina* MÁŠ ŠÚ NU PAP ŠE 1 GU₄-UD *ina* ŠÚ *ina* zib^{me} IGI
NU PAP DIR-ŠE 1 GU₄-UD *ina* ŠÚ *ina* ḪUN ŠÚ 23 GU₄-UD *ina* NIM UD-DA IGI
DIB ŠE DIR
-
- 28 MU-58-KAM ŠE DIR MU-59-KAM ¹Se-lu-ku LUGAL BAR 16 GENNA *ana* ME E-a
SIG EN 18 GENNA *ana* ŠÚ ki UŠ-a
- 29 3 KÜŠ *e* SI₄ 1½ KÜŠ *ana* ŠÚ LAL UŠ DU₆ 14 GENNA *ina* GÍR-TAB ŠÚ NU PAP
APIN 18 GENNA 'ina GÍR-TAB IGI ŠE EN' x'
- 30 GENNA *ina* SAG PA UŠ
-
- 31 MU-39-KAM ¹An u ¹Se LUGAL^{mes} BAR 21 'AN *ina* MÚL-MÚL' [ŠÚ] 'x x x' [...]
-
- 32 MU-1,10-KAM ¹Se LUGAL ŠE GE₆ 21 US[AN AN SIG MÚL-MÚL nn mm MU-1,11-
KAM]
- 33 [KI]N GE₆ 9 *ina* ZÁLAG AN SIG GIŠ.KUN A 4½ KÜŠ [...]

- first part of the night, Venus was 2½ cubits below α Librae. Night of the 10th, first part
of the night, Venus
- 18 was 5 cubits below β Librae. Month VII, the 15th, sunset to setting of Venus: 9°. Around
the 19th, Venus' last appearance in the west in Libra. Month VIII, the 7th, Venus' first
appearance in the east in Libra; it was bright and high,
- 19 rising of Venus to sunrise: 20°; (ideal) first appearance on the 4th. Month IX, night of
the 4th, last part of the night, Venus was 2 cubits below β Librae. Night of the 25th, last
part of the night, Venus was cubits above β Scorprii.
- 20 Month X, night of the 2nd, last part of the night, Venus was 2 cubits above α Scorprii.
Night of the 14th, last part of the night, Venus was 2 cubits above θ Ophiuchi. Month
XI, night of the 22nd, last part of the night, Venus
- 21 was 1½ cubits below β Capricorni. Month XII, night of the 9th, last part of the night,
Venus was 1 cubit 8 fingers above γ Capricorni. Night of the 11th, last part of the night,
Venus was
- 22 1 cubit 8 fingers above δ Capricorni. Month XII was intercalary.
-
- 23 Year 72, king Seleucus. Month I, the 2nd, Mercury's last appearance in the west in Aries;
I did not watch. Month II, the 14th, Mercury's first appearance in the east, omitted.
The 27th, Mercury's last appearance in the east, omitted.
- 24 Month III, the 28th, Mercury's first appearance in the west in Cancer; it was small, sunset
to setting of Mercury: 15°; (ideal) first appearance on the 25th. Month IV, night of the
9th, first part of the night, Mercury was 6 fingers above α Leonis.
- 25 Month V, the 3rd, Mercury's last appearance in the west in Leo. Month VI, the 1st,
Mercury's first appearance in the east in Leo; rising of Mercury to sunrise: 17° 40'; (ideal)
first appearance on the 29th of month V. The 24th, Mercury's
- 26 last appearance in the east in Virgo; I did not watch. Month VIII, the 20th, Mercury's
first appearance in the west in Sagittarius; I did not watch. The 29th, Mercury's last
appearance in the west in Sagittarius; I did not watch. Month IX, the 17th, Mercury's
first appearance in the east in Sagittarius; I did not watch.
- 27 Month X, the 27th, Mercury's last appearance in the east in Capricorn; I did not watch.
Month XII, the 1st, Mercury's first appearance in the west in Pisces; I did not watch.
Month XII₂, the 1st, Mercury's last appearance in the west in Aries. The 23rd, Mercury's
first appearance in the east, omitted. Month XII was intercalary.
-
- 28 Year 58: month XII was intercalary. Year 59, king Seleucus. Month I, the 16th, Saturn's
acronychal rising. Month III, until the 18th, when Saturn became stationary to the west,
it became stationary 3 cubits above α Scorprii, being 1½ cubits back to the west. Month
VII, the 14th, Saturn's last appearance in Scorprius; I did not watch. Month VIII, the
18th, Saturn's first appearance in Scorprius. Month XII, until,
- 30 Saturn became stationary in the beginning of Sagittarius.
-
- 31 Year 39, kings Antiochus and Seleucus. Month I, the 21st, Mars' [last appearance] in
Taurus [...]
-
- 32 Year 70, king Seleucus. Month XII, night of the 21st, first part [of the night, Mars was
.... below η Tauri. Year 71,]
- 33 [Month] VI, night of the 9th, last part of the night, Mars was 4½ cubits below θ
Leonis [...]

- 34 [SIG] DELE šá IGI ABSIN 2/3 KÙŠ APIN GE₆ 8 ina [ZÁLAG AN]
 35 [RÍN šá ULÙ] 4 SI GE₆ 22 ina ZÁLAG AN SIG [RÍN šá SI]
 36 [x x] ina ZÁLAG AN e SI₄ 2 K[ÙŠ]

Rev.

I

- 1 [MU-1,39-KA]M ¹An LUGAL
 2 [DU₆] 13 ŠÚ u na
 3 7,40 ME u GE₆
 4 APIN 15,50 ŠÚ u na
 5 9,20 ME u GE₆
 6 GAN 16,30 ŠÚ u na
 7 12 ME u GE₆
 8 AB 17,50 ŠÚ u na
 9 15,40 ME u GE₆
 10 ZÍZ 13,50 ŠÚ u na
 11 19,40 ME u GE₆
 12 ŠE 10,50 ŠÚ u na
 13 19,30 ME u GE₆

(space of 3 lines)

- 14 MU-1,40-KAM ¹An LUGAL
 15 BAR GE₆ 13 9,20 ME muš
 16 sin AN-KU₁₀ Á ULÙ
 17 ki TAB-ú GAR u ÍR
 18 DIR NU PAP ád ŠÚ ina 20 GE₆ ana
 19 {ana} ZÁLAG
 20 28 AN-KU₁₀ šamáš ki PAP NU IGI
 21 ina 35 ME ana ŠÚ šamáš
 22 DU₆ GE₆ 15 3 ME muš
 23 sin AN-KU₁₀ Á SI u KUR
 24 ki TAB-ú 2 SI ana TIL-tì TAG₄
 25 ina 28 GE₆ 'GIN'
 26 G[E₆] '29' AN-KU₁₀ šamáš šá DIB
 27 ina 1,20 GE₆ GIN
 28 ŠE GE₆ 28 AN-KU₁₀ šamáš
 29 5 ÁB BAR DIB ina 30 GE₆ ana ZÁLAG

II

- 1 MU-1,39-KAM ¹An LUGAL
 2 DIR-ŠE 30 11,30 ma-diš 'SIG'
 3 12 12,10 ŠÚ DIR NU PAP
 4 13 1,10 na DIR muš
 5 14 3 ME DIR muš
 6 15 14 GE₆ DIR muš

- 34 2/3 cubits [below] γ Virginis. Month VIII, night of the 8th, last [part of the night, Mars]
 35 4 fingers [.... α Librae.] Night of the 22nd, last part of the night, Mars was [....] below [β Librae]
 36 [....] last part of the night, Mars was 2 cubits above α Scorpii [....]

Rev.

I

- 1 [Year 99.] king Antiochus.
 2 [Month VII, 'moonset to sunrise' plus 'sunrise to moonset': 13°
 3 'moonrise to sunset' plus 'sunset to moonrise': 7° 40'
 4 Month VIII, 'moonset to sunrise' plus 'sunrise to moonset': 15° 50'
 5 'moonrise to sunset' plus 'sunset to moonrise': 9° 20'
 6 Month IX, 'moonset to sunrise' plus 'sunrise to moonset': 16° 30'
 7 'moonrise to sunset' plus 'sunset to moonrise': 12°
 8 Month X, 'moonset to sunrise' plus 'sunrise to moonset': 17° 50'
 9 'moonrise to sunset' plus 'sunset to moonrise': 15° 40'
 10 Month XI, 'moonset to sunrise' plus 'sunrise to moonset': 13° 50'
 11 'moonrise to sunset' plus 'sunset to moonrise': 19° 40'
 12 Month XII, 'moonset to sunrise' plus 'sunrise to moonset': 10° 50'
 13 'moonrise to sunset' plus 'sunset to moonrise': 19° 30'

(space of 3 lines)

- 14 Year 100, king Antiochus.
 15 Month I, night of the 13th, moonrise to sunset: 9° 20', measured;
 16 lunar eclipse: when it began on the south side,
 17 I did not watch onset and maximal phase
 18 (because of) clouds. It set eclipsed. At 20° before
 19 sunrise.
 20 The 28th, solar eclipse; when I watched I did not see it.
 21 At 35° before sunset.
 22 Month VII, night of the 15th, moonrise to sunset: 3°, measured;
 23 lunar eclipse: when it began on the north and east side,
 24 it left 2 fingers to totality.
 25 At 28° after sunset.
 26 Night of the 29th, solar eclipse which was omitted.
 27 At 80° after sunset.
 28 Month XII, night of the 28th, solar eclipse,
 29 (after) 5 months, BAR, omitted. At 30° before sunrise.

II

- 1 Year 99, king Antiochus.
 2 Month XII₂, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 11° 30'; it was very faint.
 3 The 12th, moonset to sunrise: 12° 10'; clouds, I did not watch.
 4 The 13th, sunrise to moonset: 1° 10'; measured (despite) clouds.
 5 The 14th, moonrise to sunset: 3°; measured (despite) clouds.
 6 The 15th, sunset to moonrise: 14°; measured (despite) clouds.

7	27	11,30	<i>muš</i>
8	MU-1,40-KAM ¹ A _n LUGAL		
9	BAR 1 20 KUR ₄ <i>a-pir muš ina</i> GUB IGI		
10	12	5,30	ŠÚ <i>muš</i>
11	13	9,20	ME <i>muš</i>
12	13	2	<i>na</i> DIR NU PAP
13	13 ^{sic}	7	GE ₆ DIR <i>muš</i>
14	27	11,10	DIR NU PAP
15	GU ₄ 30 15,30 <i>na muš</i>		
16	13	13,40	ME
17	13	6,40	ŠÚ
18	14	1	GE ₆ <i>muš</i>
19	14	5	<i>na muš</i>
20	27	19	<i>muš</i>
21	SIG 1 26 KUR ₄ <i>a-pir muš ina</i> GUB IGI		
22	13	4,20	ME <i>muš</i>
23	13	2	ŠÚ
24	14	9	GE ₆
25	14	9,30	<i>na muš</i>
26	27	18,30	<i>muš</i>
27	ŠU 30 21 KUR ₄ <i>a-pir muš</i>		
28	13	9	ME <i>muš</i>
29	13	8,20	ŠÚ
30	14	3	GE ₆ <i>muš</i>
31	14	4,30	<i>na muš</i>
32	27	21	<i>muš</i>

III

1	IZI 3[0]		
2	14	3	M[E]
3	14	3	ŠÚ' [...]
4	15	4	GE ₆
5	15	10,30	<i>na muš</i>
6	28	8,10	<i>a-kam ki</i> PAP NU IGI
7	KIN 1 17 KUR ₄ <i>muš ana šamáš</i> SIG		
8	13	10 UŠ	ŠÚ
9	14	2,20	ME
10	14	1,30	<i>na</i>
11	15	4,40	GE ₆ <i>muš</i>
12	27	19	<i>muš</i>
13	DU ₆ 30 10,30 SIG <i>muš</i>		

7	The 27th, (moonrise to sunrise:) 11° 30', measured.	
8	Year 100, king Antiochus.	
9	Month I, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 20°; it was bright, earthshine, measured; it was seen while (the sun) stood there.	
10	The 12th, moonset to sunrise: 5° 30', measured.	
11	The 13th, moonrise to sunset: 9° 20', measured.	
12	The 13th, sunrise to moonset: 2°; clouds, I did not watch.	
13	The 13th (error for:14th), sunset to moonrise: 7°; measured (despite) clouds.	
14	The 27th, (moonrise to sunrise:) 11° 10'; clouds, I did not watch.	
15	Month II, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 15° 30', measured.	
16	The 13th, moonrise to sunset: 13° 40'.	
17	The 13th, moonset to sunrise: 6° 40'.	
18	The 14th, sunset to moonrise: 1°, measured.	
19	The 14th, sunrise to moonset: 5°, measured.	
20	The 27th, (moonrise to sunrise:) 19°, measured.	
21	Month III, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 26°; it was bright, earthshine, measured; it was seen while (the sun) stood there.	
22	The 13th, moonrise to sunset: 4° 20', measured.	
23	The 13th, moonset to sunrise: 2°.	
24	The 14th, sunset to moonrise: 9°.	
25	The 14th, sunrise to moonset: 9° 30', measured.	
26	The 27th, (moonrise to sunrise:) 18° 30', measured.	
27	Month IV, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 21°; it was bright, earthshine, measured.	
28	The 13th, moonrise to sunset: 9°, measured.	
29	The 13th, moonset to sunrise: 8° 20'.	
30	The 14th, sunset to moonrise: 3°, measured.	
31	The 14th, sunrise to moonset: 4° 30', measured.	
32	The 27th, (moonrise to sunrise:) 21°, measured.	

III

1	Month V, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]	
2	The 14th, moonrise to sunset: 3° [...]	
3	The 14th, moonset to sunrise: 3° [...]	
4	The 15th, sunset to moonrise: 4°.	
5	The 15th, sunrise to moonset: 10° 30', measured.	
6	The 28th, (moonrise to sunrise:) 8° 10': mist, when I watched I did not see it.	
7	Month VI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17°; it was bright, measured; it was low to the sun.	
8	The 13th, moonset to sunrise: 10°.	
9	The 14th, moonrise to sunset: 2° 20'.	
10	The 14th, sunrise to moonset: 1° 30'.	
11	The 15th, sunset to moonrise: 4° 40', measured.	
12	The 27th, (moonrise to sunrise:) 19°, measured.	
13	Month VII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 10° 30'; it was faint, measured.	

14	14	7,40	ŠÚ DIR <i>muš</i>
15	15	3	ME DIR <i>muš</i>
16	15	6	<i>na muš</i>
17	16	6,40	GE ₆
18	27	21	<i>muš</i>
19	APIN 1 14 KUR ₄ <i>muš</i>		
20	14	1,50	ŠÚ DIR NU PAP
21	15	2,40	ME DIR NU PAP
22	15	14 ¹²	1 ^{na} DIR <i>muš</i>
23	16	[x	GE ₆ m]uš
24	28 ²	10+1 ^x	<i>muš</i>
25	GAN 1 19 [KUR ₄ ² <i>mu</i>]š ina GUB IGI ana šamáš SIG		
26	13	8,10+[x]	ŠÚ
27	14	12,30	ME DIR NU PAP
28	14	7,10+[x]	<i>na</i> DIR NU PAP
29	15	20 NIN[DA]	GE ₆ DIR NU PAP
30	27	9,30	DIR NU PAP
IV			
1-3	(broken)		
4	15 ¹	1 ^x	[...]
5	16	14,30	GE ₆ [...]
6	28	8,50	DIR NU PAP
7	ZÍZ 1 19 KUR ₄ <i>muš ana šamáš</i> SIG		
8	13	1,40	ŠÚ DIR NU PAP
9	14	9,20	ME <i>muš</i>
10	14	11	<i>na muš</i>
11	15	8	GE ₆ <i>muš</i>
12	27	13,20	DIR NU PAP
13	ŠE 1 21 DIR NU PAP		
14	12	6,50	ŠÚ DIR NU PAP
15	13	15,10	ME DIR NU PAP
16	13	3	<i>na</i> DIR NU PAP
17	14	2,10	GE ₆ DIR NU PAP
18	26	17	<i>muš</i>
19	BAR 30 16 <i>muš</i>		
33	1 ^U ₄ -1-KAM IGI-DUH-A ^{meš} DIB-qa ^{meš} u AN-KU ₁₀ ^{meš} šá a-na MU-1 ^{me} -1 ⁸ -KAM 1 ^{An} u 1 ^{An} A-šú [LUGAL ^{me}]š		
34	<i>kun-nu-u</i>		

14	The 14th,	moonset to sunrise: 7° 40', measured (despite) clouds.
15	The 15th,	moonrise to sunset: 3°, measured (despite) clouds.
16	The 15th,	sunrise to moonset: 6°, measured.
17	The 16th,	sunset to moonrise: 6° 40'.
18	The 27th,	(moonrise to sunrise:) 21°, measured.
19	Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	14°; it was bright, measured.
20	The 14th,	moonset to sunrise: 1° 50'; clouds, I did not watch.
21	The 15th,	moonrise to sunset: 2° 40'; clouds, I did not watch.
22	The 15th,	sunrise to moonset: 14° ² ; measured (despite) clouds.
23	The 16th,	[sunset to moonrise: x], measured.
24	The 28th ² ,	(moonrise to sunrise:) 10+x°, measured.
25	Month IX, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	19°; [it was bright ¹ , mea]sured. It was seen while (the sun) stood there; it was low to the sun.
26	The 13th,	moonset to sunrise: 8° 10+[x]°.
27	The 14th,	moonrise to sunset: 12° 30'; clouds, I did not watch.
28	The 14th,	sunrise to moonset: 7° 10+[x]°; clouds, I did not watch.
29	The 15th,	sunset to moonrise: 20'; clouds, I did not watch.
30	The 27th,	(moonrise to sunrise:) 9° 30'; clouds, I did not watch.
IV		
1-3	(broken)	
4	The 15th, [...]	
5	The 16th,	sunset to moonrise: 14° 30', [...]
6	The 28th,	(moonrise to sunrise:) 8° 50'; clouds, I did not watch.
7	Month XI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	19°; it was bright, measured; it was low to the sun.
8	The 13th,	moonset to sunrise: 1° 40'; clouds, I did not watch.
9	The 14th,	moonrise to sunset: 9° 20', measured.
10	The 14th,	sunrise to moonset: 11°, measured.
11	The 15th,	sunset to moonrise: 8°, measured.
12	The 27th,	(moonrise to sunrise:) 13° 20'; clouds, I did not watch.
13	Month XII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	21°; clouds, I did not watch.
14	The 12th,	moonset to sunrise: 6° 50'; clouds, I did not watch.
15	The 13th,	moonrise to sunset: 15° 10'; clouds, I did not watch.
16	The 13th,	sunrise to moonset: 3°; clouds, I did not watch.
17	The 14th,	sunset to moonrise: 2° 10'; clouds, I did not watch.
18	The 26th,	(moonrise to sunrise:) 17°, measured.
19	Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:)	16°, measured.

33-34 First days, appearances, passings and eclipses which are established for year 118, [kings] Antiochus and Antiochus, his son.

Comments

Two impressions, lozenge-shaped, of a stamp seal, are to be seen on the left edge, one opposite rev. 13, the other opposite rev. 17.

Obv. 1: the reading at the end is a guess; there is broken space on the edge to allow to restore a measure of distance.

3: At the date given Jupiter is approaching the 'front stars of Cancer', η and θ . The partially broken sign before *meš* is, however, not IGI. *ana* SIG may be read *ana šupli* 'downwards', but I do not know how to read the following two signs.

28: On this anomalous date see G. R. F. Assar and M. G. Bagloo, in *Parthica* 8 (2006), forthcoming.

29: of the number at the end, only two small wedges are preserved so that it can be anything between 4 and 8.

32: the year number 1,10 is clear, but it must be 1,11, which also agrees with the observations recorded.

Rev. I 19: *ana* is erased.

II 2: 30 is written (as a correction) above the line.

No. 21

BM 32566 (= S+ 76-11-17, 2309)

Photo: Pl. 17

Goal year: SE 120

'Obv.'

1' [...] 'MÚL¹-BABBAR *ana* NIM *ki-i* UŠ-¹ú¹

2' [...] (blank)

3' [...] D]U₆ GE₆ 3 *ina* ZÁLAG MÚL-BABBAR *e* GÌR *ár šá* A

4' [...] (blank)

5' [...] *e* MÚL IGI *šá*] 'še-*pít*¹ MAŠ-MAŠ 2 KÙŠ GE₆ 13 US[AN] 'dele-bat¹

6' [*e* MÚL *ár šá še-pít* MAŠ-MAŠ nn mm [...] 'GU₄¹ 21 *dele-bat* *ina* ŠÚ *ina* A² [ŠÚ]

7' [...] 'MÚL¹ IGI *šá še-pít* M[AS-MAŠ]

8' [...] MAŠ-MAŠ *šá* SIPA 1½¹ [KÙŠ [...]

9' [...] 'x¹ [...]

'Rev.'

I and II broken;

III

1' [...] *n*]a' DIR NU PAP

2' [...] G]E₆ DIR NU PAP

3' [...] 'x¹ *muš*

No. 21

'Obv.'

1' [...] when Jupiter became stationary to the east,

2' [...] (blank)

3' [...] Mo]nth VII, night of the 3rd, last part of the night, Jupiter was [...] above β Virginis

4' [...] (blank)

5' [...] Venus was] 2 cubits [above η] Geminorum. Night of the 13th, first part of the night, Venus

6' [was above μ Geminorum] Month II, the 21st, Venus' [last appearance] in the west in Leo.

7' [...] η Geminorum

8' [...] 1½² [cubits above] γ Gemi[norum]

9' [...] [...]

'Rev.'

I and II broken;

III

1' [The xth,] moonrise to sunset: [...]; clouds, I did not watch.

2' [The xth,] sunset to moonrise: [...]; clouds, I did not watch.

3' [The xth, (moonrise to sunrise:)], measured.

IV

- 1' [...] 'x' [...]
 2' [ŠE x x]+1,30 DIR 'NU PAP'
 3' [14] 30 NINDA ŠÚ
 4' 15 40 NINDA ME
 5' 15 8 na
 6' 16 15,40 GE₆
 7' 26 15,50 NU PAP
 8' DIR-ŠE 30 16 'x' [x] 'muš'

Colophon

[...] kun-nu-'u'

Comments

Obv. 5'f.: the rather high latitude of Venus is an additional confirmation of the date; restorations based on computation.

6': the restoration of ŠÚ is based on USAN in the preceding line: if Venus is already evening star, a phenomenon in the west shortly afterwards can only be last appearance, not first.

No. 22

BM 34149 (= Sp 252)

Copy: LBA 1238

Photo: Pl. 20

Bibliography: L. Brack-Bernsen, SEAC 5th (1999) 21

Goal year: SE 122

'Obv.'

- 1' [...] 21st ina ZÁLAG MÚL-BABBAR e M[ÚL]
 2' [...] e 'MÚL' e [ša SAG GÍR-TAB] 'x' SI DIR-ŠE 'x x x x'
 3' [MU-1-me-13-KAM KIN DI]R MU-1-me-14-KAM ¹An u ¹An [A-šú] LUGAL^{meš} BAR
 GE₆ 19 ina [ZÁLAG] dele-bat SIG MÚL KUR 'ša' DUR [nu-nu]
 4' [...] dele-bat SIG MÚL IGI ša SAG HUN 5 KÙŠ GU₄ GE₆ 1+[x ina ZÁ]LAG dele-bat
 SIG MÚL ár ša SAG HUN 6 KÙŠ GE₆ 15+[x]
 5' [...] ana NIM] DIB GE₆ 28 ina ZÁLAG dele-bat e is le₁₀ 2 KÙŠ SIG G[E₆] 8 ina ZÁLAG
 dele-bat SIG šur GIGIR ša SI 2½ KÙŠ GE₆ 10+[x]
 6' [...] ULÛ ½ KÙŠ GE₆ 19 ina ZÁLAG [dele-bat e] MÚL I[GI ša] 'še'-[pit MA]Š-'MAŠ'
 3rd SIst GE₆ 21 ina ZÁLAG dele-bat e MÚL ár [...]
 7' [...] dele-bat e MAŠ-MAŠ ša SIPA 3rd KÙŠ ŠU GE₆ [...] KÙŠ GE₆ 7 ina ZÁLAG dele-bat
 SIG MAŠ-[MAŠ]
 8' [...] ina ZAL]ÁG dele-bat e MÚL ár ša ALLA 'ša ULÛ' x' [...] SIG SAG A] 4 KÙŠ IZI
 GE₆ 6' [...]

IV

- 1' [...] [...]
 2' [Month XII, (sunset to moonset:) x]+1° 30'; clouds, I did not watch.
 3' [The 14th,] moonset to sunrise: 30'.
 4' The 15th, sunrise to moonset: 40'.
 5' The 15th, moonrise to sunset: 8°.
 6' The 16th, sunset to moonrise: 15° 40'.
 7' The 26th, (moonrise to sunrise:) 15° 50'; I did not watch.
 8' Month XII₂, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 16°[....], measured?.

Colophon

[...] were established [...]

Date

A last appearance of Venus in the west close to II 21 (obv. 6'), combined with Jupiter passing β Virginis on VII 3 (obv. 3'), suffices to establish the Goal year as SE 120. This is confirmed by a XII₂ 18 years before the goal year (rev. II 8').

No. 22

'Obv.'

- 1' [...] Night] of the 21stst, last part of the night, Jupiter was [...] above [δ Scorpīi]
 2' [...] Jupiter was] x fingers above β [Scorpīi.] Month XII₂, [...]
 3' [Year 113, month VI was inter]calary. Year 114, kings Antiochus and [his son] Antiochus. Month I, night of the 19th, last part of the night, Venus was [...] below η Piscium [...]
 4' [...] Venus was 5 cubits below β Arietis. Month II, night of the 1+[xth, last] part of the night, Venus was 6 cubits below α Arietis. Night of the 15+[xth,]
 5' [...] having passed [...] to the east.] Night of the 28th, last part of the night, Venus was 2 cubits above α Tauri. Month III, night of the 8th, last part of the night, Venus was 2½ cubits below β Tauri. Night of the 10+[xth,]
 6' ½ cubit [above] ζ [Tauri.] Night of the 19th, last part of the night, [Venus was] 3rd fingersst [above] η Geminorum. Night of the 21st, past part of the night, Venus was [...] above μ [Geminorum].
 7' [...] Venus was 3rd cubits above γ Geminorum. Month IV, night [...] cubits. Night of the 7th, last part of the night, Venus was [...] below [α] Gemi[norum]
 8' [...] last part] of the night, Venus was [...] above δ Cancri [...] 4 cubits [below ε Leonis] Month V, night of the 6thst, [...]

- 9' [...] 'x¹ SI GE₆ 13 ina [ZÁLAG dele-bat x x x] 'x¹ 6 SI KIN 13 7,30 n[a dele-bat i]n 15 dele-bat ina NIM [...]
- 10' [...] dele-bat ina ŠÚ ina PA IGI [x x x] in 22 IGI ZÍZ GE₆ 18 USAN dele-[bat x MÚ]L KUR šá D[UR nu-nu nn mm ...]
- 11' [...] USAN dele-bat SIG MÚL IGI šá SAG HUN 3½ KÜŠ GE₆ 28 USAN dele-bat SIG MÚL [ár šá SAG] H[UN nn mm ŠE GE₆ x]
- 12' [USAN dele-bat] SIG MÚL-MÚL 1½ KÜŠ GE₆ 25 USAN dele-bat e is le₁₀ 3 KÜŠ
- 13' [MU-1,15-KAM] KIN DIR MU-1,16-KAM ¹Se LUGAL BAR 2 GU₄-UD ina ŠÚ ina MÚL-MÚL IGI GE₆ 6 U[SAN ...]
- 14' [...] USJAN GU₄-UD SIG šur SI 1½ KÜŠ GE₆ 16 USAN GU₄-UD e šur ULÙ 1½ [KÜŠ ...]
- 15' [...] ina NIM ina MAŠ-MAŠ IGI GE₆ 21 ina ZÁLAG GU₄-UD [SIG] MAŠ-MAŠ IGI 5 KÜŠ 27 GU₄-U[D ina NIM ina x ŠÚ]
- 16' [...] 'x¹ IGI 21 GU₄-UD ina ŠÚ ina ABSIN ŠÚ KIN 24 GU₄-UD ina NIM ina ABSIN [IGI ...]
- 17' [...] 2 KÜŠ in 25 GU₄-UD ina NIM ina RÍN [ŠÚ GAN] 10 GU₄-UD ina ŠÚ ina MÁŠ² IGI [...]
- 18' [...] S]I MÁŠ 2 KÜŠ ZÍZ 24 GU₄-UD ina NIM ina GU [ŠÚ ŠE] 26 GU₄-UD ina 'ŠÚ¹ ina HUN IGI [...]
- 19' [MU-1-šu-3-KAM ¹An LUGAL] BAR in EN 23 GENNA ana NIM ki [U]Š-ú 1 [KÜŠ²] ina IG[I ...]
- 20' [...] IZI in 22 GENNA ana ŠÚ ki UŠ-a [ina] SAG MÁŠ U[Š ...]
- 21' [...] ina ZÁLAG GENNA SIG SI M[ÁŠ²] 'x x¹ [...]
- 22' [...] 'x x¹ [...]

'Rev.'

I

- 1' [...] DIR
- 2' [...] NU IGI
- 3' [...] 'x¹
- 4' [...] GE₆
- 5' [...]
- 6' [...] 'x¹

- 9' [...] fingers [...] Night of the 13th, [last part of the night, Venus was] 6 fingers [...] Month VI, the 13th, rising of Venus to sunrise: 7° 30'. Around the 15th, Venus' [last appearance] in the east [...]
- 10' [...] Venus' first appearance in the west in Sagittarius; [...] (ideal) first appearance on the 22nd. Month XI, night of the 18th, first part of the night, Venus was [...] η Pis[cium ...]
- 11' [...] first part of the night, Venus was 3½ cubits below β Arietis. Night of the 28th¹, first part of the night, Venus was [...] below [α Arietis. Month XII, night of the xth,]
- 12' [first part of the night, Venus] was 1½ cubits below η Tauri. Night of the 25th, first part of the night, Venus was 3 cubits above α Tauri.
- 13' [Year 75,] month VI was intercalary. Year 76, king Seleucus. Month I, the 2nd, Mercury's first appearance in the west in Taurus. Night of the 6th, first [part of the night, ...]
- 14' [...] first] part of the night, Mercury was 1½ cubits below β Tauri. Night of the 16th, first part of the night, Mercury was 1½ cubits above ζ Tauri [...]
- 15' [...] first appearance in the east in Gemini. Night of the 21st, last part of the night, Mercury was 5 cubits [below] α Geminorum. The 27th, Mercury's [last appearance in the east in ...]
- 16' [...] (ideal) first appearance on the xth. The 21st, Mercury's last appearance in the west in Virgo. Month VI, the 24th, Mercury's [first appearance] in the east in Virgo [...]
- 17' [...] 2 cubits [...] Around the 25th, Mercury's [last appearance] in the east in Libra. [Month IX,] the 10th, Mercury's first appearance in the west in Capricorn¹ [...]
- 18' [...] 2 cubits [below] β Capricorni. Month XI, the 24th, Mercury's [last appearance] in the east in Aquarius. [Month XII,] the 26th, Mercury's first appearance in the west in Aries [...]
- 19' [Year 63, king Antiochus.] Month I, around until the 23rd, when Saturn became stationary to the east, [it became stationary] 1 [cubit²] in front [...]
- 20' [...] Month V, around the 22nd, when Saturn became stationary to the west, [it became stationary in] the beginning of Capricorn [...]
- 21' [...] last part of the night, Saturn was below β Capricorni [...]
- 22' [...] [...]

'Rev.'

I

- 1' [...] clouds
- 2' [...] I did not see it.
- 3' [...]
- 4' [...] sunset to moonrise: [...]
- 5' [...]
- 6' [...]

II

- 1' 'x' [...]
 2' ŠU 1 19 KUR₄ a-pir 'muš'
 3' 13 13 ŠÚ
 4' 14 2.30 ME muš
 5' 14 2.10 na muš
 6' 15 10.30 GE₆ 'muš'
 7' 27 17.30 muš
 8' IZI 1 18 n[a]-su ina GUB IGI KUR₄ muš ana šamáš NIM
 9' 13 7,[x]+20 ME muš
 10' 13 2 ŠÚ muš
 11' [1]4 1.30 GE₆ a muš
 12' [1]⁴ 14 [na] muš
 13' [...] muš

III

- 1' 1[2 x ŠÚ]
 2' 13 3+[x na]
 3' 14 3 ME [...]
 4' 15 7.50 [GE₆]
 5' 27 20.50 [...]
 6' AB 1 23 KUR₄ DIR mu[š x x] ana ša[máš x]
 7' 12 6.50 ŠÚ DIR NU PAP
 8' 13 9.50 ME DIR NU PAP
 9' 13 5.50 na DIR NU PAP
 10' 14 3 GE₆ DIR NU PAP
 11' 27 9 DIR¹ muš
 12' ZÍZ 30 21 na-su KUR₄ a-pir muš ina GUB IGI
 13' [x]+1 3.50 ŠÚ DIR NU PAP
 14' [x] 4.10 ME DIR NU PAP
 15' [x x]+4.50¹ n[a]

IV (uninscribed as far as preserved)

Comments

Obv. 1': since Jupiter is near a stationary point in months XI and XII, the date is difficult to restore. The star must be δ Scorpī (MÚL MURUB₄ šá SAG GÍR-TAB), followed by β Scorpī in line 2'.

19': The dates given for Saturn's phenomena do not agree too well with computation. In addition, Saturn was invisible when passing β Capricornī.

II

- 1' [...]
 2' Month IV, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 19°; it was bright, earthshine, measured.
 3' The 13th, moonset to sunrise: 13°.
 4' The 14th, moonrise to sunset: 2° 30'; measured.
 5' The 14th, sunrise to moonset: 2° 10'; measured.
 6' The 15th, sunset to moonrise: 10° 30'; measured.
 7' The 27th, (moonrise to sunrise:) 17° 30'; measured.
 8' Month V, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 18°; it could be seen while (the sun) stood there; it was bright, measured; it was high to the sun.
 9' The 13th, moonrise to sunset: 7° [x]+20'; measured.
 10' The 13th, moonset to sunrise: 2°; measured.
 11' [The 1]4th, sunset to moonrise: 1° 30'; measured (despite) mist.
 12' [The 1]4th, [sunrise to moonset:] 14°; measured.
 13' [...] measured.

III

- 1' The 1[2th, moonset to sunrise:]
 2' The 13th, [sunrise to moonset:] 3+[x°]
 3' The 14th, moonrise to sunset: 3° [...]
 4' The 15th, [sunset to moonrise:] 7° 50' [...]
 5' The 27th, (moonrise to sunrise:) 20° 50' [...]
 6' Month X, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 23°; it was bright, measured (despite) clouds [...] it was [...] to the sun.
 7' The 12th, moonset to sunrise: 6° 50'; clouds, I did not watch.
 8' The 13th, moonrise to sunset: 9° 50'; clouds, I did not watch.
 9' The 13th, moonset to sunrise: 5° 50'; clouds, I did not watch.
 10' The 14th, sunset to moonrise: 3°; clouds, I did not watch.
 11' The 27th, (moonrise to sunrise:) 9°; measured (despite) clouds'.
 12' Month XI, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 21°; it was bright, earthshine, measured; it could be seen while (the sun) stood there.
 13' [The x]+1, moonset to sunrise: 3° 50'; clouds, I did not watch.
 14' [...] moonrise to sunset: 4° 10'; clouds, I did not watch.
 15' [...] sunrise] to moonset: [x]+4° 50' [...]

IV (uninscribed as far as preserved)

No. 23

BM 34216 (= Sp 322) + 35080 (= Sp II 616)

Copies: LBA 1239 (34216), 1240 (35080)

Photo: Pl. 20

Goal year: SE 122

Upper edge

1 *ina a-mat* ^dEN *u* ^dGASAN-*ia liš-lim*

Obv.?

1 MU-50-KAM ŠE DIR MU-51-KAM ¹A[n]2 [*ina*] ¹SAG²¹ RÍN UŠ (erasure) KIN [....]3 [x] ¹x IGI KUR¹ 10 UŠ *na-su in* 12 [IGI]4 [.... *ina* S]AG GÍR-TAB UŠ5 [MU-39-KAM] ¹An *u* ¹Se LUGAL^{meš} [....]6 [....] *ana* NIM *ina* LAL-šú *e* S[A₄¹ šá ABSIN²] (erasure)7 [....] DIR ¹x x x¹ [....] (erasure)8 [MU-1-me-1]3-KAM KIN DIR ¹MU¹-1-me-14-KAM ¹An *u* ¹An A-šú [LUGAL^{meš}]9 [DUR] *nu-nu* 3½ KÜŠ [GE₆] 26 *ina* ZÁLAG *dele-bat* SIG MÚL IGI šá S[AG HUN]10 [šá SAG H]UN 6 KÜŠ [x x] ¹x¹ *ina* ZÁLAG *dele-bat* SIG MÚL-MÚL 2 KÜŠ [....]11 [....] ¹x x¹ [....]

'Rev.'

I

1' [....] ZÁLAG²2' [....] *sin*²3' [....] ¹x¹4' [....] ¹x¹

II

1' 13 [x ŠÚ]

2' 14 2+[x] ME *muš*3' 14 2.10 *na muš*4' 15 10.30 GE₆ *muš*5' 27 17.30 *muš*

III

1' 12 1+[x ŠÚ]

2' 13 7 [ME]

3' 13 11+[x *na*]4' 14 2¹ [GE₆]

5' 26+[x x]

No. 23

Upper edge

1 At the command of Bel and Beltija may it go well.

Obv.?

1 Year 50, month XII was intercalary. Year 51, [kings²] Antiochus [and Antiochus²]2 it became stationary [in] the beginning¹ of Libra. Month VI, [....]

3 first appearance [in]; it was bright, rising of Jupiter to sunrise: 10°; [(ideal) first appearance] on the 12th [....]

4 [....] it became stationary in the beginning of Scorpius.

5 [Year 39,] kings Antiochus and Seleucus [....]

6 [....] when moving back to the east, was [....] above α² [Virginis]7 [....] clouds¹ [....]

8 [Year 11]3, month VI was intercalary. Year 114, [kings] Antiochus and his son Antiochus [....]

9 3½ cubits [below η] Piscium. [Night] of the 26th, last part of the night, Venus was [....] below β Arietis [....]

10 6 cubits [below α Arie]tis. [....] last part of the night, Venus was 2 cubits below η Tauri [....]

11 [....] [....]

'Rev.'

I

1' [....]

2' [....] moon²

3' [....]

4' [....]

II

1' The 13th, [moonset to sunrise:]

2' The 14th, moonrise to sunset: 2+[x°]; measured.

3' The 14th, sunrise to moonset: 2° 10'; measured.

4' The 15th, sunset to moonrise: 10° 30'; measured.

5' The 27th, (moonrise to sunrise:) 17° 30'; measured.

III

1' The 12th, [moonset to sunrise:] 1+[x°]

2' The 13th, [moonrise to sunset:] 7+[x°]

3' The 13th, [sunrise to moonset:] 11+[x°]

4' The 14th, [sunset to moonrise:] 2°¹ [....]

5' The 26+[xth,]

Colophon

1 [...] IGI-DUH-A^{meš} DIB-qa^{meš} [...]

Comments

Obv. 6: The only Normal Star passed by Jupiter between second station and last visibility is α Virginis.

No. 24

BM 41098 (=81-4-28, 645)

Listed as LBAT *1242

Photo: Pl. 20

Goal year: SE 124?

Flake

I'

1' -3' [...] 'x'

II'

1' [...] 'x' [...]

2' [...] 'x' USAN [...]

3' [...] 'x' [ina] MÚL-MÚL ŠÚ ŠE 'DIR'

4' MU-1,17-KAM ŠE DIR MU-1,18-KAM [...]

5' UD-DA IGI DIB GU₄ 17 GU₄-UD ina NI[M [...]

6' [GU₄-UD] 'ina ŠÚ ina' ALLA IGI 13 na-su [...]

7' [...] 'x' GU₄-UD' ina N[IM? [...]

Comments

The Mercury paragraph implies a Goal year of SE 124. The Venus paragraph would then refer to SE 116. This year has no month XII₂, however; also, Venus did not become invisible in Taurus. A format in columns is unusual for Goal year texts. Therefore, this fragment may contain Mercury observations only. The last appearance preserved of the first paragraph of col. II' could refer to Mercury's last appearance in the west in month XII₂ of SE 77, which took place in Taurus. The text should have been included in Vol. V.

Colophon

1 [First days,] appearances, passings, [and eclipses]

No. 24

Flake

I'

1' -3' [...]

II'

1' [...] [...]

2' [...], first part of the night, [...]

3' [...] last appearance in Taurus. Month XII was intercalary.

4' Year 77: month XII was intercalary. Year 78, [...]

5' first appearance, omitted. Month II, the 17th, Mercury's [last appearance] in the east [...]

6' [Mercury's] first appearance in the west in Cancer; sunset to setting of Mercury: 13°;

7' [...] [...]

7' [...] Mercury's [...] in the ea[st?]

No. 25

BM 32628 (= 76-11-17,2374)

Photo: Pl. 21

Goal year: SE 127

Flake

- 1' [...] 'x' 5 [...]
 2' [...] 'x x MÚL'-BABBAR SIG MÚL KUR šá DUR 'nu'-[nu]
 3' [...] GE₆ 5 ina ZÁLAG *dele-bat* SIG MÚL KUR šá DUR nu-nu 2 K[ÜŠ]
 4' [...] 'KÜŠ' GE₆ 16 ina ZÁLAG *dele-bat* SIG MÚL ár šá SAG HUN 5 [KÜŠ]
 5' [...] GE₆ 13' ina ZÁLAG *dele-bat e is* le₁₀ 2 KÜŠ 'GE₆ 22' ina¹ [ZÁLAG]
 6' [...] ina ZÁLAG *dele-bat e šur* GIGIR šá ULÙ 1 KÜŠ SIG 22 *dele-bat* [ina NIM ina x ŠÚ]
 7' [...] *dele*-'bat ina ŠÚ' ina 'ABSIN¹ IGI KUR NIM-a 9 na-su in 6 [IGI]
 8' [...] 'KÜŠ¹ GAN GE₆ 5 USAN *dele-bat e* MÚL IGI šá SU[HUR MÁŠ]
 9' [...] 'x' ZÍZ GE₆ 2 USAN *dele-bat* SIG MÚL KUR šá DUR [nu-nu]
 10' [...] 'KÜŠ' GE₆ 13 USAN *dele-bat* SIG MÚL ár šá S[AG HUN]
 11' [...] *dele-bat e is* le₁₀ 2 2/3 KÜŠ GE₆ 'x' [...]
 12' [...] e] 'šur GIGIR' šá ULÙ 2½ KÜŠ [...]
 13' [...] 'x' ana¹ NIM 20¹ [...]
 14' [...] GU₄ GE₆ 6 U[SAN]
 15' [...] x IGI KUR₄ 19 na-s[u]
 16' [...] 'x' NU PAP in 20+[x....]
 17' [...] 'APIN¹ 26¹ [...]

Comments

12': there seems to be some space between lines 12' and 13'. Lines 13'ff. probably refer to Mercury because there are several first or last appearances in the small amount of text that remains. Also, Venus data in lines 6' to 12' cover just one year.

No. 26

BM 34717 (= Sp II 206)

Copy: LBAT 1243

Photo: Pl. 21

Goal year: SE 129

'Obv.'

- 1' [...] 'x' [...]
 2' [...] 12,30 na [GU₄-UD]
 3' [...] I]ZI 11 GU₄-UD ina ŠÚ ina TIL A IGI TUR 15 [na-su]

No. 25

Flake

- 1' [...] 25¹ [...]
 2' [...], Jupiter was [...] below η Pis[cium]
 3' [...] Night of the 5th, last part of the night, Venus was 2 cubits below η Piscium [...]
 4' [...] cubits¹. Night of the 16th, last part of the night, Venus was 5 [cubits] below α Arietis [...]
 5' [...] Night of the 13th¹, last part of the night, Venus was 2 cubits above α Tauri. Night of the 22nd¹, [last part of the night¹,]
 6' [...] last part of the night, Venus was 1 cubit above ζ Tauri. Month III, the 22nd, Venus' [last appearance in the east in]
 7' [...] first appearance [in the] west in Virgo¹; it was bright (and) high, sunset to setting of Venus: 9°; [(ideal) first appearance] on the 6th. [...]
 8' [...] cubits. Month IX, night of the 5th, first part of the night, Venus was [...] above γ Capri[corni]
 9' [...] Month XI, night of the 2nd, first part of the night, Venus was [...] below η Pis[cium]
 10' [...] cubits. Night of the 13th, first part of the night, Venus was [...] below α Arietis. [...]
 11' [...] Venus was 2 2/3 cubits above α Tauri. Night of the xth, [...]
 12' [...] 2½ cubits [above] ζ Tauri [...]
 13' [...] 20¹ [...]
 14' [...] Month II, night of the 6th, first [part of the night,]
 15' [...] first appearance [...]; it was bright, 19° [...]
 16' [...] I did not watch. Around the 20+[xth,]
 17' [...] Month VIII¹, the 26th¹, [...]

Date

A last appearance of Venus in the east around III 22, combined with Jupiter passing η Piscium towards the end of the year 75 years earlier, fits only SE 119, resulting in a Goal year of SE 127.

No. 26

'Obv.'

- 1' [...] [...]
 2' [...] visibility [of Mercury:] 12° 30' [...]
 3' [...] Mon]th V, the 11th, Mercury's first appearance in the west in the end of Leo; it was small, [sunset to setting of Mercury:] 15° [...]

- 4' [... DU₆] 6 GU₄-UD *ina* NIM *ina* ABSIN IGI TUR 14,40 *na-su* i[n x IGI]
 5' [... AP]IN 3 12,40 *na* GU₄-UD *in* 4 GU₄-UD *ina* NIM *ina* RÍN ŠÚ [...]
 6' [... AB] 10 GU₄-UD *ina* [ŠÚ *ina*] 'MÁŠ' ŠÚ *in* 24 GU₄-UD *ina* NIM *ina* MÁŠ I[GI]
 7' [... ZÍZ GE₆ x *ina* ZÁLAG GU₄-UD SIG SI] MÁŠ 2 K[ÙŠ ŠE] 'x' 14 *na* GU₄-UD *in* 7 GU₄-UD *ina* 'NIM *ina* x' [ŠÚ]
 8' [...] 'IGI' NU PAP GE₆ 20 [USAN] GU₄-UD SIG MÚL-MÚL 14 SI GE₆ 27 U[SAN']
 9' [MU-1-š_u-9-KAM ¹Se LUGAL DIR-ŠE x GEN]NA *ina* TIL *zib*^{me} IGI '7¹ *na-su* *in* 24 IGI MU-1,10-KAM ¹Se LUGAL BAR [...]
 10' [...] SIG MÚL KUR šá DUR *nu-nu* 2 2/3 KÙŠ ŠU *in* EN 20 GENNA *ana* N[IM *ki* UŠ-ú]
 11' [...] ½ KÙŠ *ana* NIM DIB UŠ 'x' [GE₆] 15¹ *ina* ZÁLAG 'GENNA x x' [...]
 12' [...] KIN (x) 9 GENNA *ana* ME E-a [...] 'x' [...]
 13' [...] 'x' [...] 'x' *in* 'x' [...]
 14' [...] 17 *na-su* [...]
 15' [...] 19¹ AN 'x' [...]

'Rev.'

I and II broken;

III

- 1' [...] 'x'
 2'-4' (broken)
 5' [...] KUR₄ a-[*pir*]
 6' [...] *muš*
 7' [...] x ME¹ *muš*
 8' [...] *muš*

IV

- 1' [...] x
 2' [...] x x x x
 3' [...] x x x
 4' 10+[x x] 'x x'
 5' 10+[x x] 'x x'
 6' 10+[x]
 7' 15² x [...]
 8' 27 x [...]
 9' ZÍZ 30 10+[x]
 10' 15 13 [ME]
 11' 15 3 'ŠÚ¹ [...]
 12' 16 10+[x GE₆]

Comments

Obv. 10': the date given for the stationary point differs by about 20 days from computation.

11': the star passed by Saturn must again be η Piscium.

- 4' [... Month VII,] the 6th, Mercury's first appearance in the east in Virgo; it was small, rising of Mercury to sunrise: 14° 40' [...]
 5' [... Mon]th VIII, the 3rd, rising of Mercury to sunrise: 12° 40'. Around the 4th, Mercury's last appearance in the east in Libra [...]
 6' [... Month X,] the 10th, Mercury's last appearance in [the west in] Capricorn¹. Around the 24th, Mercury's fi[rst appearance] in the east in Capricorn [...]
 7' [... Month XI, night of the xth, last part of the night, Mercury was] 2 cu[bits below β] Capricorni. [Month XII,] the xth, rising of Mercury to sunrise: 14°. Around the 7th, Mercury's [last appearance] in the east in [...]
 8' [...] first appearance [...]; I did not watch. Night of the 20th, [first part of the night,] Mercury was 14 fingers below η Tauri. Night of the 27th, fi[rst part of the night]¹, [...]
 9' [Year 69, king Seleucus. Month XII₂, the xth, Sat]urn's first appearance in the end of Pisces; rising of Saturn to sunrise: 7°¹; (ideal) first appearance on the 24th. Year 70, king Seleucus. Month I, [...]
 10' [...] 2 2/3 cubits below η Piscium. Month IV, around until the 20th, [when] Saturn [became stationary to the east,]
 11' it became stationary [...], having passed ½ cubit to the east. Month ..., [night] of the 15th, last part of the night, Saturn [...]
 12' [... Month VI, around] the 9th, Saturn's acronychal rising [...] [...]
 13' [...] [...] on [...]
 14' [...] visibility: 17° [...]
 15' [...] the 19th¹, Mars [...]

'Rev.'

I and II broken:

III

- 1' [...]
 2'-4' (broken)
 5' [...] it was bright, earth[shine]
 6' [...] measured.
 7' [...] moonrise to sunset:; measured.
 8' [...] measured.

IV

- 1'-3' [...]
 4' The 10+[xth,]
 5' The 10+[xth,]
 6' The 10+[xth,]
 7' The 15th¹ [...]
 8' The 27th, [...]
 9' Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 10+[x°]
 10' The 15th, [moonrise to sunset:] 13° [...]
 11' The 15th, [moonset to sunrise:] 3° [...]
 12' The 16th, [sunset to moonrise:] 10+[x°]

No. 27

BM 45786 (= 81-7-6,202) + 45909 (= 81-7-6,342) + 46113 + 46146 (= 81-7-6,563+602+606)

Copy: LBA 1304 (45909)

45786 was brought to my attention by I. L. Finkel. It is in a rather bad state of preservation.

Photo: Pl. 22

Goal year: SE 129

Upper edge

1 [...] 'x' [...]

Obv.

- 1 [...] 'x' [...]
- 2 [x x x] 'x x x x x x' [...]
- 3 [ZÍZ in²] '4' MÚL-BABBAR ana ŠÚ ki UŠ-a 2/3 K[ÜŠ]
- 4 [x x] 'x x x x x' [...]
- 5 [x x] 'x x x' [...]
- 6 (traces)
- 7 (traces)
- 8 (traces)
- 9 [...] 'x' [...]
- 10 [... GÍR] 'ár¹ šá A 2 SI dele-bat 1² 'SI' [...]
- 11 [...] USAN dele-bat e SA₄ 'šá' [ABSIN]
- 12 [... SIG RÍN šá] SI '4 KÜŠ' GE₆ 25 USAN dele-bat [...]
- 13 [... DU₆ GE₆ x]+1 USAN dele-bat e SI₄ 'x' [KÜŠ²] 8² SI 'GE₆ x' [...]
- 14 [... GE₆] 24² USAN dele-bat 'SIG² SI² [MÁŠ] 'x x' AB 15² dele-bat ina ŠÚ ina [MÁŠ ŠÚ....]
- 15 [...] 'dele-bat ina NIM ina' [MÁŠ] 'IGI x x x x dele-bat² x SI 'MÁŠ' 2² 'x x' [...]
- 16 [... e MÚL IGI šá SUHUR] MÁŠ² 2 KÜŠ² 'x' 'GE₆ 15² ina ZÁLAG dele-bat e² MÚL ár šá SUHUR [MÁŠ]
- 17 [MU-1,23-KA]M¹ Se²-lu²-ku² [LUGAL²] BAR 11 GU₄-UD ina ŠÚ² ina MÚL²-MÚL² IGI KUR 15² [...]
- 18 [... SIG šur] GIGIR šá SI 1 KÜŠ x 'GU₄² GE₆ 3 USAN 'GU₄-UD' e šur GIGIR [šá ULÜ]
- 19 [...] 'x' GU₄-UD 'ina ŠÚ² ina MAŠ-MAŠ² ŠÚ² SIG² 26² GU₄-UD ina NIM² x x [...]
- 20 [...] 'GU₄-UD² ina NIM ina TIL MAŠ-MAŠ ŠÚ² NU PAP 'IZI² x x x x' ina [...]
- 21 [... GU₄-UD]D ina 'ŠÚ² ina ABSIN ŠÚ DU₆ 7 GU₄-UD ina NIM² ina ABSIN² IGI² 'x' [...]
- 22 e S[A₄² šá ABSI]N² 1 KÜŠ APIN 3 'GU₄-UD ina NIM² x x x ŠÚ² [...]
- 23 ina ŠÚ [ina x IGI] 'AB' 10 GU₄-UD ina ŠÚ ina 'MÁŠ² ŠÚ² 24² [...]
- 24 ZÍZ GE₆ [x ina ZÁLAG GU₄-UD SIG] SI² MÁŠ 2² KÜŠ 'x' [...]
- 25 DIR-ŠE 6 'GU₄²-UD ina ŠÚ ina HUN IGI] 'x x x' [...]
- 26 MU-1-šu-9-KAM DIR-Š[E 2]6 GENNA 'ina' [zib^{me} IGI....]

No. 27

Upper edge

1 [...] [...]

Obv.

- 1 [...] [...]
- 2 [...] [...]
- 3 [Month XI, around²] the 4th, when Jupiter became stationary to the west, [it became stationary] 2/3 cu[bit]
- 4 [...] on [...]
- 5 [...] [...]
- 6 (traces)
- 7 (traces)
- 8 (traces)
- 9 [...] [...]
- 10 [...] 2 fingers [...] β] Virginis, Venus being 1² finger [...]
- 11 [...] first part of the night, Venus was [...] above α Vir[ginis]
- 12 [...] 4 cubits [below β] Librae. Night of the 25th, first part of the night, Venus was [...]
- 13 [...] Month VII, night of the x]+1st, first part of the night, Venus was x [cubits] 8² fingers above [α Scor]pii. Night of the xth, [...]
- 14 [...] Night of] the 24th², first part of the night, Venus was below β [Capricorni.] Month X, the 15th², Venus [last appearance] in the west in [Capricorn]
- 15 [...] Venus' first appearance in the east in [Capricorn] Venus was 2² β Capricorni. [...]
- 16 [...] 2 cubits² [above γ Capri]corni., night of the 15th², last part of the night, Venus was [...] above² δ Capri[corni]
- 17 [Year 83, king] Seleucus². Month I, the 11th, Mercury's first appearance in the west² in Taurus²; it was bright, [sunset to setting of Mercury:] 15^o² [...]
- 18 [...] 1 cubit [below] β Tauri Month II², night of the 3rd, first part of the night, Mercury was [...] above ζ Tauri. [...]
- 19 [...] The xth, Mercury's last² appearance in the west² in Gemini² Month III², the 26th², Mercury's [first appearance] in the east² [...]
- 20 [...] Mercury's last appearance in the east in the end of Gemini; I did not watch. Month V², in [...]
- 21 [...] Mer]cury's last appearance in the west² in Virgo. Month VII, the 7th, Mercury's first appearance in the east² in Virgo² [...]
- 22 1 cubit above α² [Virgini]s. Month VIII, the 3rd, Mercury's last appearance in the east² [...]
- 23 [first appearance] in the west [in] Month X, the 10th, Mercury's last appearance in the west in Capricorn². The 24th², [...]
- 24 Month XI, night [of the xth, last part of the night, Mercury was] 2² cubits [below] β² Capricorni [...]
- 25 Month XII₂, the 6th, Mer[cury's first appearance in the west in Aries] [...]
- 26 Year 69, month XII₂, [the 2]6th, Saturn's [first appearance] in [Pisces]

- 27 SIG GE₆ 8 *ina* ZÁLAG GENNA *ana* NIM *ki* UŠ-ú 'x' [...]
 28 3 KÙŠ SIG MÚL KUR šá DUR *nu-nu* ½ KÙŠ [...]
 29 šá DUR *nu-nu* 2 2/3 KÙŠ KIN *in* 9 [...]
 30 *ina* IGI MÚL KUR šá DUR *nu-nu* 3 KÙŠ *ana* ULÛ [SIG]
 31 MU-50-KAM ¹An LUGAL GAL-ú *u* ¹An A-šú [...]
 32 AB EN 8 AN *ana* NIM *ki-i* UŠ-ú 8² U² 'e² [...]
 33 'ZÍZ 20² AN *ana* ME E-a ŠE EN 23 AN *ana* ŠÚ *ki-i* 'i² [...]
 34 [MU]-1,22-KAM ¹Se LUGAL SIG GE₆ 17 *ina* ZÁLAG AN SI[G²]
 35 'x' ŠU GE₆ 2 *ina* ZÁLAG AN *e* MÚL IGI šá *še-pít* [MAŠ-MAŠ nn mm]

Lower edge

- 1 GE₆ 9 *ina* ZÁLAG AN *e* MAŠ-MAŠ šá SIPA 3½ K[ÙŠ]
 2 *ina* ZÁLAG AN SIG MAŠ-MAŠ *ár* 2½ KÙŠ GE₆ 21 *ina* ZÁ[LAG]
 3 'e¹ MÚL *ár* šá ALLA šá ULÛ 4 SI KIN GE₆ 19 *ina* ZÁL[AG AN]
 4 'e¹ LUGAL 10 SI GE₆ 18 *ina* ZÁLAG AN *e* MÚL TUR '10' [SI]
 5 4² KÙŠ GE₆ 29 *ina* ZÁLAG AN [...]

Rev.

- 1 [ZÍZ] GE₆ 22 USAN AN *ana* ŠÚ *ina* LAL-šú *e* GÌR *ár* šá 'A' [... AN *ana* ŠÚ]
 2 [*ina* LA]L-šú SIG GIŠ.KUN A 4 KÙŠ

I

- 3 [MU]-'1¹-me-10-KAM ¹An *u* ¹An
 4 A-šú LUGAL^{meš}
 5 DU₆ 12,20 ŠÚ *na*
 6 7,30 ME GE₆
 7 APIN 13,10' ŠÚ *na*
 8 10,30 ME GE₆
 9 GAN 13,20 ŠÚ *na*
 10 11,50 ME GE₆
 11 AB 10,20 ŠÚ *na*
 12 14,40' M[E GE₆]
 13 ZÍZ 12,10+[x] ŠÚ *na*
 14 15+[x] ME GE₆
 15 'ŠE' [x] ŠÚ *na*
 16 [x] ME GE₆

- 27 Month III, night of the 8th, last part of the night, when Saturn became stationary to the east, [... it became stationary]
 28 3 cubits below η Piscium, ½ cubit [...]
 29 2 2/3 cubits [below η] Piscium. Month VI, around the 9th, [Saturn's acronychal rising it became stationary]
 30 in front of η Piscium, being 3 cubits [low] to the south [...]
 31 Year 50, Antiochus being great king and his son Antiochus [king]
 32 Month X, until the 8th, when Mars became stationary to the east, [it became stationary] 8² fingers above [...]
 33 Month XI, the 20th², Mars' acronychal rising. Month XII, until the 23rd, when Mars [became stationary] to the west, [...]
 34 [Year] 82, king Seleucus. Month III, night of the 17th, last part of the night, Mars was [... below² [...]
 35 Month IV, night of the 2nd, last part of the night, Mars was [...] above η Geminorum.

Lower edge

- 1 Night of the 9th, last part of the night, Mars was 3½ cubits above γ Geminorum. [...]
 2 last part of the night, Mars was 2½ cubits below β Geminorum. Night of the 21st, last part [of the night,]
 3 4 fingers above δ Cancr. Month VI, night of the 19th, last part [of the night, Mars was]
 4 10 fingers above α Leonis. Night of the 18th, last part of the night, Mars was 10 [fingers] above ρ [Leonis]
 5 4² cubits [...] Night of the 29th, last part of the night, Mars was [...]

Rev.

- 1 [Month XI,] night of the 22nd, first part of the night, Mars, while moving back to the west, was [...] above β Virginis. [... Mars, while] moving [back to the west,]
 2 was 4 cubits below θ Leonis.

I

- 3 [Year] 110, kings Antiochus and
 4 his son Antiochus.
 5 Month VII, 'moonset to sunrise' (plus) 'sunrise to moonset': 12° 20'
 6 'moonrise to sunset' (plus) 'sunset to moonrise': 7° 30'
 7 Month VIII, 'moonset to sunrise' (plus) 'sunrise to moonset': 13° 10'
 8 'moonrise to sunset' (plus) 'sunset to moonrise': 10° 30'
 9 Month IX, 'moonset to sunrise' (plus) 'sunrise to moonset': 13° 20'
 10 'moonrise to sunset' (plus) 'sunset to moonrise': 11° 50'
 11 Month X, 'moonset to sunrise' (plus) 'sunrise to moonset': 10° 20'
 12 'moonrise to [sunset] (plus) 'sunset to moonrise': 14° 40'
 13 Month XI, ['moonset to sunrise' (plus) 'sunrise to moonset':] 12° 10+[x']
 14 ['moonrise to sunset' (plus) 'sunset to moonrise':] 15+[x°]
 15 Month XII, ['moonset to sunrise' (plus) 'sunrise to moonset':]
 16 ['moonrise to sunset' (plus) 'sunset to moonrise':]

- 17 [...] 'x¹
 18 [...] 'x¹ DIR¹-ŠE 14¹
 19 [...] DJIB¹ in 50 ME NIM-a
 20 [...] AN-KU₁₀ šamaš šá DIB
 21 [in x] GE₆ ana ZÁLAG
 22 [KIN sin¹] AN-KU₁₀ 'x x¹
 23 [...] 'x x x x¹
 24 [...] 'x¹ ina¹ 'x¹
 25 [...] 2]-ta ŠU^{II} HAB-rat
 26 [GE₆ 2]8¹ AN-KU₁₀ šamaš šá DIB
 27 [in x GE₆] ana ZÁLAG
 28 ZÍZ 29 AN-KU₁₀ šamaš šá D[IB¹]
 29 in 57 ME ana Š[Ú šamaš]
 30 ŠE GE₆ 15 7,40 ME [(x x)]
 31 sin AN-KU₁₀ Á ULÛ 'u KUR¹
 32 ki-i TAB-ú 'ina 20+x GE₆¹
 33 gab-bi-šú 'ŠÚ in 1 x¹
 34 GE₆ ana ZALÁG

II

- 3 MU-1-me-10-KAM
 4 [D]IR-ŠE 1 19 na-su KUR₄ a-pir muš
 5 14 13,10 ME 'muš¹
 6 14 1 ŠÚ DIR 'muš¹
 7 15 4 GE₆
 8 15 11 na muš
 9 27 12,30¹ KUR¹ DIR muš
 10 'MU¹-[1-me-11-KAM]
 11 [BAR] 'x¹ [...]
 12 [14 x]+2 ŠÚ DIR [...]
 13 [15] 2 'x¹ ME DIR [...]
 14 [15] 'x¹ na m[uš]
 15 [1]6 15 GE₆ DIR m[uš]
 16 '26¹ 15 KUR mu[š²]
 17 GU₄ 30 11¹ na a 'x¹
 18 13 5¹, 30¹ 'ŠÚ DIR x x¹
 19 14 9,20¹ ME 'x x¹
 20 14 'x¹, 50 na 'x x¹
 21 15 6,50¹ GE₆ DIR muš²
 22 27 11+'x¹ KUR
 23 SIG 1 14¹, 30 a-kam 'x¹

(break)

- 17 [...]
 18 [...] Month XII₂, the 14th¹,
 19 [...] pa]ssed¹. At 50° after sunrise.
 20 [...] solar eclipse which was omitted.
 21 [At x°] before sunrise.
 22 [Month VI, lunar¹] eclipse
 23 [...]
 24 [...]
 25 [...] two]-thirds of the disc.
 26 [Night of the 2]8th¹, solar eclipse which was omitted.
 27 [At x°] before sunrise.
 28 Month XI, the 29th, solar eclipse which was om[itted¹.]
 29 At 57° before sunset.
 30 Month XII, night of the 15th, moonrise to sunset: 7° 40'; [(....)]
 31 lunar eclipse; when it began on the south and east side,
 32 in 20+x° of night
 33 it was totally covered. At 1,x°
 34 before sunrise.

II

- 3 Year 110,
 4 Month XII₂, the 1st (of which followed the 30th of the preceding month,) sunset to
 moonset: 19°; it was bright, earthshine, measured.
 5 The 14th, moonrise to sunset: 13° 10'; measured.
 6 The 14th, moonset to sunrise: 1°; measured (despite) clouds.
 7 The 15th, sunset to moonrise: 4°.
 8 The 15th, sunrise to moonset: 11°; measured.
 9 The 27th, moonrise to sunrise: 12° 30+[x']; measured (despite) clouds.
 10 Year [111,]
 11 [Month I,] [...]
 12 [The 14th,] moonset to sunrise: [x]+2°; clouds, [...]
 13 [The 15th,] moonrise to sunset: 2° x; clouds, [...]
 14 [The 15th,] sunrise to moonset:; mea[sured.]
 15 [The 1]6th, sunset to moonrise: 15°; mea[sured] (despite) clouds.
 16 The 26th¹, moonrise to sunrise: 15°; measu[red¹.]
 17 Month II, (the 1st of which was identical with) the 30th (of the preceding month,) sunset
 to moonset: 11°¹, mist¹,
 18 The 13th, moonset to sunrise: 5°¹ 30¹; clouds,
 19 The 14th, moonrise to sunset: 9° 20¹;
 20 The 14th, sunrise to moonset: x° 50';
 21 The 15th, sunset to moonrise: 6° 50¹; measured (despite) clouds.
 22 The 27th, moonrise to sunrise: 11+x°.
 23 Month III, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)
 14°¹ 30'; mist,

(break)

- 1' Š[U]
 2' 12 4 [ŠÚ]
 3' 13 6' [ME]
 4' 13 10 UŠ[na]
 5' 14 8',20' [GE₆]
 6' 27' 22 [KUR]

III

- 3 IZ[I']
 4 [....]
 5 12+[x]
 6 [....]
 7 10+[x]
 8 10+[x]
 9 20+[x]
 10 K[IN]

Colophon

- 1 UD-1-KAM IGI-DUḪ^{meš} DIB^{meš}? 'u x x' [....]

Comments

- Obv. 4: I could imagine the line to begin [MU-4]6-KAM, but I cannot make sense of the rest.
 11: Venus passed α Virginis on V 22.
 12: the star passed by Venus on VI 25 is δ Scorpī.
 13: in the broken right part of the line, θ Ophiuchi will have been recorded.
 15: Venus met β Capricorni (again) on XI 20.
 20: a first appearance in the west is computed for V 12.
 22: Mercury was about 2 cubits above α Virginis, but no other Normal star was passed between VII 7 and VIII 3.
 27f.: usually, only the day number is given for planetary phenomena; parts of the night are only indicated for conjunction with stars. The statement in line 7' refers to the position of the stationary point in the east. In the missing second part of line 6', something more must have been stated. Since the position follows only in line 7', another date may have been given. Note that according to computation the station falls on III 30, so III 8 is very much off.
 30: This position must refer to the station in the west; for acronychal rising and last appearance, positions are never given.
 32: on this date, Mars was about 3° above β Virginis, for which 8 fingers is too low. Maybe <1 KÙŠ> was omitted because of the preceding ú (same sign as KÙŠ) ?
 34: probably β Tauri to be restored.
 Rev. I 18f.: lunar eclipse of -200 Mar 30.
 20f.: solar eclipse of -200 Apr 13.
 22ff.: lunar eclipse of -200 Sep 22.
 26f.: solar eclipse of -200 Oct 8.
 28f.: solar eclipse of -199 Mar 4.
 30ff.: lunar eclipse of -199 Mar 19; the damaged number at the end seems to be 5 or 15, resulting in a time interval of 65° or 75°. See Huber and De Meis, p. 66.

- 1' Month IV, [....]
 2' The 12th, [moonset to sunrise:] 4° [....]
 3' The 13th, [moonrise to sunset:] 6°' [....]
 4' The 13th, [sunrise to moonset:] 10° [....]
 5' The 14th, [sunset to moonrise:] 8°' 20' [....]
 6' The 27th', [moonrise to sunrise:] 22° [....]

III

- 3 Month V', [....]
 4 [....]
 5 The 12+[xth,]
 6 [....]
 7 The 10+[xth,]
 8 The 10+[xth,]
 9 The 20+[xth,]
 10 Mon[th VI,]

Colophon

- 1 First days, appearances, passings and [....]

No. 28

BM 45626 (= 81-7-6, 19)

Copy: LBAT 1246

Goal year: SE 131

'Obv.'

1' [...] 'x x x x' [...]

2' [...] 'GU₄' 13 GU₄-UD ina NIM 'x' [...]3' [...] 'x x' ŠU GE₆ 4 USAN GU₄-UD e LUGAL 'x' [x]4' [...] nn] na-su ina 24 IGI KIN 18 GU₄-UD ina NIM ina ABS[IN ŠÚ AP]IN 175' [...] ina PA ŠÚ? NU PAP GAN 12 GU₄-UD ina NIM ina 'PA' I[GI]6' [...] ina ŠÚ ina] zib^{me} IGI NU PAP ŠE GE₆ 17 USAN GU₄-UD7' [...] GU₄-UD ina ŠÚ] ina HUN ŠÚ NU PAP ŠE DIR

8' [...] NU PAP KIN EN 13 GENNA ana NIM 'ki-i UŠ-ú'

9' [...] ana ME] 'E'-a AB EN 19 GENNA ana ŠÚ k[i UŠ-a x] 'x'

10' [...] 'x x' [x x] 'x'

11' [...] ina MAŠ-MAŠ IGI NU PAP [...] 'x' ŠE 12 AN ana ME E-a

12' [...] ina ZÁLAG AN SIG MAŠ-MAŠ [IGI x] ½ KÙŠ 'ŠU' GE₆ 6 ina ZÁLAG AN13' [SIG MAŠ-MAŠ ár nn mm] MÚL IGI šá ALLA šá 'ULÜ' 'x x' [IZI GE₆ x]+1
ina ZÁLAG AN14' [...] G]E₆ 18 ina ZÁLAG AN SIG [SAG A nn] 'KÙŠ KIN' GE₆ 315' [ina ZÁLAG AN e LUGAL nn mm] 'e' MÚL TU[R š]á 4 KÙŠ ár LUGAL 6 SI
DU₆ GE₆ 516' [...] ina ZÁLAG AN e GÌR ár šá A 6 SI APIN GE₆ 14 ina ZÁLAG AN

17' [SIG DELE šá IGI ABSIN] 'x x'

'Rev.'

I'

1' [...] 'x'

2' [...]

3' [...] 'x' muš

4' [...] a-kam muš

5' [...] 'x x' SIG

6' [...] ŠÚ muš

No. 28

'Obv.'

1' [...] [...]

2' [...] Month II, the 13th, Mercury's [...] in the east [...]

3' [...] Month IV, night of the 4th, first part of the night, Mercury was above α
Leonis [...]4' [...] rising of Mercury to sunrise: [...]; (ideal) first appearance on the 24th. Month VI,
the 18th, Mercury's [last appearance] in the east in Virgo. Month VIII, the 17th,5' [...] last appearance [...] in Sagittarius; I did not watch. Month IX, the 12th, Mercury's
first appearance in the east in Sagittarius?6' [...] first appearance [in the west in] Pisces; I did not watch. Month XII, night of the
17th, first part of the night, Mercury was7' [...] Mercury's last appearance [in the west] in Aries; I did not watch. Month XII was
intercalary.8' [...] I did not watch. Month VI, until the 13th, when Saturn became stationary to the
east,9' [...] acronychal] rising. Month X, until the 19th, when Saturn [became stationary] to
the west,

10' [...] [...]

11' [...] first appearance in Gemini; I did not watch. [...] Month XII, the 12th, Mars'
acronychal rising.12' [...] last part of the night, Mars was [x]+½ cubits below [α] Geminorum. Month IV,
night of the 6th, last part of the night, Mars was13' [...] below β Geminorum] θ? Cancri. [Month V, night of the x]+1st, last part of
the night, Mars was14' [...] Night of the 18th, last part of the night, Mars was [nn] cubits below [ε Leonis.]
Month VI, night of the 3rd,15' [last part of the night, Mars was above α Leonis] 6 fingers above q Leonis.
Month VII, night of the 5th,16' [...] last part of] the night, Mars was 6 fingers above β Virginis. Month VIII, night of
the 14th, last part of the night, Mars was

17' [...] below γ Virginis]

'Rev.'

I'

1' [...]

2' [...]

3' [...], measured.

4' [...] measured (despite) mist.

5' [...] faint?.

6' [...] moonset to sunrise: [...]; measured.

- 7' [...] *muš*
8' [...] 'muš'

II'

- 1' 11+[x]
2' 10+[x]
3' 10+[x]
4' 27[?] 'x' [...] *na*
5' GAN 30 10+[x]
6' 13 7[?] 10+[x ŠÚ]
7' 14 2 [ME]
8' 14 3 [*na*]
9' 15 12 G[E₆]
10' 28 16[?] [...] *na*
11' AB '1' [...] *na*
12' [x] 'x' [...] *na*
13' [x x] 'x' [...] *na*
14' [x x]+1 20+[x]
15' [...] 'x' [...] *na*

No. 29

BM 32293 (= S+ 76-11-17, 2021+2239)

Listed as LBAT *1248

Photo: Pl. 23

Goal year: SE 134

'Obv.' in very bad condition, only occasional groups of signs which show that it is planetary data.

'Rev.' in very bad condition, only occasional groups of signs which show that it is planetary data.

I

- 1' [...] 'x, 40 ŠÚ *na*'
2' [...] 40 ME GE₆
3' [...] 10+[x] ŠÚ *na*
4' [...] MJE GE₆
5' [...] 'ŠÚ' *na*
6' [...] ME] GE₆
7' [...] ŠÚ *na*
8' [...] ME GE₆
9' [...] ŠÚ *na*
10' [...] MJE GE₆
11' [...] 'x'

- 7' [...] measured.
8' [...] measured.

II'

- 1' The 11+[xth,]
2' The 10+[xth,]
3' The 10+[xth,]
4' The 27th[?], [....]
5' Month IX, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 10+[x°]
6' The 13th, [moonset to sunrise:] 7°[?] 10+[x']
7' The 14th, [moonrise to sunset:] 2° [....]
8' The 14th, [sunrise to moonset:] 3° [....]
9' The 15th, sunset [to moonrise:] 12° [....]
10' The 28th, [moonrise to sunrise:] 16°[?] [....]
11' Month X, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) [....]
12' [....] [....]
13' [....] [....]
14' [....] [....]
15' [....] [....]

No. 29

'Rev.'

I

- 1' [...] 'moonset to sunrise' (plus) 'sunrise to moonset': x° 40'
2' 'moonrise to sunset' (plus) 'sunset to moonrise': [x°] 40'
3' [...] 'moonset to sunrise' (plus) 'sunrise to moonset': [x°] 10+[x]
4' 'moonrise to sunset' (plus) 'sunset to moonrise': [....]
5' [...] 'moonset to sunrise' (plus) 'sunrise to moonset': [....]
6' 'moonrise to sunset' (plus) 'sunset to moonrise': [....]
7' [...] 'moonset to sunrise' (plus) 'sunrise to moonset': [....]
8' 'moonrise to sunset' (plus) 'sunset to moonrise': [....]
9' [...] 'moonset to sunrise' (plus) 'sunrise to moonset': [....]
10' 'moonrise to sunset' (plus) 'sunset to moonrise': [....]
11' [...]

II

- 1' '14' [...]
 2' 15 9 'x' [...]
 3' 27 11,20 KUR DIR NU PAP
 4' MU-1-me-16-KAM 'An u 'An
 5' A-šú LUGAL^{meš}
 6' BAR 1 25,30 DIR NU PAP
 7' 12 4 ŠÚ *muš*
 8' 13 12,50 ME *muš*
 9' 13 3,40 *na muš*
 10' 14 1 GE₆ *muš*
 11' 26 15 KUR DIR *muš*
 12' GU₄ 30 19 KUR₄ a-pir *muš*
 13' 13 4 ŠÚ DIR *muš*
 14' [1]4 8 ME DIR *muš*
 15' [14] 5' *na muš*
 16' [15 x] GE₆ *muš*
 17' [x x]+10 KUR *muš*
 18' [...] 'x' *muš*
 19' [...] 'muš'

III

- 1' [x x n]a *muš*
 2' [x x]+1 KUR *muš*
 3' 'KIN' [...] KUR₄ a-pir *muš*
 4' [ina GUB] IGI ana šamáš SIG
 5' 14 '2'+[x] ME *muš*
 6' 14 [x] 'ŠÚ' *muš*
 7' 15 5+[x GE₆] *muš*
 8' 15 15 [n]a' *muš*
 9' 27 14 KUR *muš*
 10' DU₆ 30 12 na-'su' *muš*
 11' 14 7,30 ME *muš*
 12' 14 8,50 ŠÚ D[IR] NU PAP
 13' 15 1 GE₆ DIR N[U P]AP
 14' 15 8' *na DIR m[u]š*
 15' 28 10,30 KUR a-ka[m x]
 16' APIN 1 12,30 KUR₄ 'x' [...]
 17' 13 16 ŠÚ DIR NU [PAP]
 18' 14 8' ME *mu[š]*
 19' [14] [x]+20 NINDA *na* NU PAP
 20' [15 x] 'GE₆ *muš*'

II

- 1' The 14th, [...]
 2' The 15th, [...] 9° [...]
 3' The 27th, moonrise to sunrise: 11° 20'; clouds, I did not watch.
 4' Year 116, kings Antiochus and Antiochus,
 5' his son.
 6' Month I, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 25° 30'; clouds, I did not watch.
 7' The 12th, moonset to sunrise: 4°, measured.
 8' The 13th, moonrise to sunset: 12° 50', measured.
 9' The 13th, sunrise to moonset: 3° 40', measured.
 10' The 14th, sunset to moonrise: 1°, measured.
 11' The 26th, moonrise to sunrise: 15°; measured (despite) clouds.
 12' Month II, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 19°; it was bright, earthshine, measured.
 13' The 13th, moonset to sunrise: 4°, measured (despite) clouds.
 14' The 14th, moonrise to sunset: 8°, measured (despite) clouds.
 15' [The 14th,] sunrise to moonset: 5°[?], measured.
 16' [The 15th,] sunset to moonrise: [x°], measured.
 17' [...] moonrise to sunrise: [x]+10°, measured.
 18' [...], measured.
 19' [...] measured.

III

- 1' [...] moonrise to sunset: [...], measured.
 2' [...] moonrise to sunrise: [x]+1°, measured.
 3' Month VI, [...] it was bright, earthshine, measured.
 4' It was seen [while (the sun) stood there], it was low to the sun.
 5' The 14th, moonrise to sunset: 2+[x°], measured.
 6' The 14th, moonset to sunrise: [x°], measured.
 7' The 15th, [sunset to moonrise:] 5+[x°], measured.
 8' The 15th, sunrise to moonset: 15°, measured.
 9' The 27th, moonrise to sunrise: 14°, measured.
 10' Month VII, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 12°, measured.
 11' The 14th, moonrise to sunset: 7° 30', measured.
 12' The 14th, moonset to sunrise: 8° 50'; clouds, I did not watch.
 13' The 15th, sunset to moonrise: 1°; clouds, I did not watch.
 14' The 15th, sunrise to moonset: 8°[?]; measured (despite) clouds.
 15' The 28th, moonrise to sunrise: 10° 30'; mist [...]
 16' Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 12° 30'; it was bright, [...]
 17' The 13th, moonset to sunrise: 16°; clouds, I did not watch.
 18' The 14th, moonrise to sunset: 8°[?], measured.
 19' [The 14th,] sunrise to moonset: [x]+20°; I did not watch.
 20' [The 15th,] sunset to moonrise: [...], measured.

IV

- 1' [1]⁴ 'x' [...]
 2' 15 9 GE₆ 'x'
 3' 27¹ 19 KUR m[uš]
 4' AB 1 17,30 KUR₄ m[uš]
 5' 12 7,30 ŠÚ mu[š]
 6' 13 12,30 ME m[uš]
 7' 13 5 na m[uš]
 8' 14 4 GE₆ D[IR]
 9' 26 17 KUR mu[š]
 10' ZÍZ 30 12,10 DI[R]
 11' 12 11,30 ŠÚ DI[R]
 12' 13 1,20 na [DI]R¹ [...]
 13' 14 4 ME DIR [...]
 14' 15 14,10 GE₆ D[IR]
 15' 27 11 KUR [...]
 16' ŠE 1 10+[x]
 17' 'x' [...]

No. 30

BM 35221 (= Sp II 780)

Copy: LBAT 1247

Photo: Pl. 24

Goal year: SE 135

Obv. not preserved;

'Rev.

I

- 1' 'x x'

II

- 1' [in 1]⁵ ME ana ŠÚ 'šamáš'
 2' [APIN¹] GE₆ 15 AN-KU₁₀ sin
 3' '5 ÁB' BAR DIB
 4' [ina] 46¹ GE₆ GIN
 5' GE₆ 29 AN-KU₁₀ šamáš
 6' šá DIB ina 1,31
 7' GE₆ G[IN]

Colophon

- 1 [... AN]-KU₁₀^{meš} šá a-na MU-1-me-32-[KAM]

IV

- 1' The 14th, [...]
 2' The 15th, sunset to moonrise: 9°,
 3' The 27th¹, moonrise to sunrise: 19°, measured.
 4' Month X, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17° 30'; it was bright, measured.
 5' The 12th, moonset to sunrise: 7° 30', measured.
 6' The 13th, moonrise to sunset: 12° 30', measured.
 7' The 13th, sunrise to moonset: 5°, measured.
 8' The 14th, sunset to moonrise: 4°; cl[ouds,]
 9' The 26th, moonrise to sunrise: 17°, measured.
 10' Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 12° 10'; clou[ds,]
 11' The 12th, moonset to sunrise: 11° 30'; clou[ds,]
 12' The 13th, sunrise to moonset: 1° 20'; cl[ouds¹,]
 13' The 14th, moonrise to sunset: 4°; clouds, [...]
 14' The 15th, sunset to moonrise: 14° 10'; cl[ouds,]
 15' The 27th, moonrise to sunrise: 11° [...]
 16' Month XII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 10+[x°;]
 17' [...] [...]

No. 30

'Rev.

I

- 1'

II

- 1' [At 1]5° before sunset.
 2' [Month VIII¹] night of the 15th, lunar eclipse
 3' (after) 5 months; BAR, omitted.
 4' [At] 46° after sunset.
 5' Night of the 29th, solar eclipse
 6' which was omitted. At 91°
 7' after sunset.

Colophon

- 1 [... and eclip]ses which [were established] for year 132 [...]

Date

While the year number in the colophon seems to be a clear 132, the eclipses do not fit the corresponding year SE 114. On the other hand, the eclipse paragraph is duplicated by BM 34048 (LBAT 1249), which is dated to SE 135. Since so little is preserved on this fragment, I simply assume a scribal error in the year number.

No. 31

BM 34048 (Sp 144)

Copy: LBA 1249

Photo:

Goal year: SE 135

Upper edge

1 [ina a-mat ^dEN] u GAŠAN-ia liš-lim

Obv.:

1 MU-1-šu¹-4-KAM ¹An-ti-u-uk-su LUGAL GU₄ 3 MÚL-BABBAR ana ME E-a SIG EN
27 MÚL-BABBAR ana ŠÚ ki UŠ-a2 ½ KÚŠ ina IGI MÚL e šá SAG GÍR-TAB UŠ APIN 9 14 na MÚL-BABBAR in 12
MÚL-BABBAR ina GÍR-TAB ŠÚ3 GAN 14 MÚL-BABBAR ina TIL GÍR-TAB IGI TUR 13 na-su in 12 IGI DIR-ŠE in
EN 19 MÚL-BABBAR ana NIM4 ki UŠ-¹ú¹ ár 4-AM ár^{meš} šá PA UŠ ŠE DIR5 MU-52-KAM ¹An LUGAL BAR GE₆ 13 USAN MÚL-BABBAR ana ŠÚ ina LAL-šú
ana MÚL e šá SAG GÍR-TAB TE IZI GE₆ 27 USAN MÚL-BABBAR ana NIM ina
LAL-šú6 SIG MÚL e šá SAG GÍR-TAB 6 SI DU₆ GE₆ 8 USAN MÚL-BABBAR e SI₄ 3 KÚŠ7 MU-1-me-27-KAM ¹Se-lu-ku LUGAL BAR GE₆ 4 ina ZÁLAG dele-bat SIG MÚL KUR
šá DUR nu-nu 4 KÚŠ GE₆ 10 ina ZÁLAG dele-bat8 SIG MÚL IGI šá SAG HUN 5 KÚŠ GE₆ 14 ina ZÁLAG dele-bat SIG MÚL ár šá SAG
HUN 6 KÚŠ GE₆ 30 ina ZÁLAG dele-bat9 SIG MÚL-MÚL 2 KÚŠ GU₄ GE₆ 10 ina ZÁLAG dele-bat e is le₁₀ 2 KÚŠ GE₆ 19 ina
ZÁLAG dele-bat SIG šur GIGIR šá SI 3 KÚŠ10 SIG 20 7,30 na dele-bat in 22 dele-bat ina 'NIM' ina ALLA ŠÚ KIN 1 dele-bat ina ŠÚ
ina SAG RÍN IGI TUR 8 na-su11 APIN GE₆ 20 USAN dele-bat SIG SI MÁŠ [x]+1 KÚŠ GAN GE₆ 3 USAN dele-bat e
MÚL IGI šá SUHUR MÁŠ 4 SI12 GE₆ 5 USAN dele-bat e MÚL ár šá SUHUR MÁŠ 4 SI AB GE₆ 30 USAN dele-bat SIG
MÚL KUR šá DUR nu-nu 2 KÚŠ13 ZÍZ GE₆ 6 USAN dele-bat SIG MÚL IGI šá SAG HUN '3' KÚŠ GE₆ 10 USAN dele-bat
SIG MÚL ár šá SAG HUN 4 KÚŠ14 GE₆ 29 USAN dele-bat SIG MÚL-MÚL 2/3 KÚŠ ŠE GE₆ 10 USAN dele-bat e is le₁₀ 3
KÚŠ GE₆ 23 USAN dele-bat15 SIG šur GIGIR šá SI ½ KÚŠ GE₆ 26 USAN dele-bat e šur GIGIR šá ULÙ 2½ KÚŠ16 MU-1,29-KAM ¹Se LUGAL BAR GE₆ 9 USAN GU₄-UD 'x' [x x x x] GE₆ 11 USAN
GU₄-UD

No. 31

Upper edge

1 [At the command of Bel] and Belija may it go well.

Obv.:

1 Year 64, king Antiochus. Month II, the 3rd, Jupiter's acronychal rising. Month III,
until the 27th, when Jupiter became stationary to the west,2 it became stationary ½ cubit in front of β Scorp. Month VIII, the 9th, sunset to
setting of Jupiter: 14°. Around the 12th, Jupiter's last appearance in Scorp.3 Month IX, the 14th, Jupiter's first appearance in the end of Scorp.; it was small,
rising of Jupiter to sunrise: 13°; (ideal) first appearance on the 12th. Month XII₂,
around until the 19th, when Jupiter became stationary to the east,

4 it became stationary behind the four rear ones of Sagittarius. Month XII was intercalary.

5 Year 52, king Antiochus. Month I, night of the 13th, first part of the night, Jupiter,
while moving back to the west, came close to β Scorp. Month V, night of the 27th,
first part of the night, Jupiter, while moving back to the east,6 was 6 fingers below β Scorp. Month VII, night of the 8th, first part of the night,
Jupiter was 3 cubits above α Scorp.7 Year 127, king Seleucus. Month I, night of the 4th, last part of the night, Venus was 4
cubits below η Piscium. Night of the 10th, last part of the night, Venus was8 5 cubits below β Arietis. Night of the 14th, last part of the night, Venus was 6 cubits
below α Arietis. Night of the 30th, last part of the night, Venus was9 2 cubits below η Tauri. Month II, night of the 10th, last part of the night, Venus was 2
cubits above α Tauri. Night of the 19th, last part of the night, Venus was 3 cubits
below β Tauri.10 Month III, the 20th, rising of Venus to sunrise: 7° 30'. Around the 22nd, Venus' last
appearance in the east in Cancer. Month VI, the 1st, Venus' first appearance in the
west in the beginning of Libra; it was small, sunset to setting of Venus: 8°.11 Month VIII, night of the 20th, first part of the night, Venus was [x]+1 cubits below β
Capricorni. Month IX, night of the 3rd, first part of the night, Venus was 4 fingers
above γ Capricorni.12 Night of the 5th, first part of the night, Venus was 4 fingers above δ Capricorni.
Month X, night of the 30th, first part of the night, Venus was 2 cubits below η Piscium.13 Month XI, night of the 6th, first part of the night, Venus was 3 cubits below β Arietis.
Night of the 10th, first part of the night, Venus was 4 cubits below α Arietis.14 Night of the 29th, first part of the night, Venus was 2/3 cubit below η Tauri. Month
XII, night of the 10th, first part of the night, Venus was 3 cubits above α Tauri. Night
of the 23rd, first part of the night, Venus was15 ½ cubit below β Tauri. Night of the 26th, first part of the night, Venus was 2½ cubits
above ζ Tauri.16 Year 89, king Seleucus. Month I, night of the 9th, first part of the night, Mercury
[...] Night of the 11th, first part of the night, Mercury was

- 17 [e šur GIGI]R šá ULÙ 2 KÙŠ GE₆ [x]+3 USAN [....]
 18 [e MÚL ár šá] 'še-pit' MAŠ-MAŠ 1½ K[ÙŠ]

'Rev.

I

- 1' [ŠE x Š]Ú n[a]
 2' 15¹,40ME GE₆
 (blank)
 3' MU-1-me-17-KAM
 4' GU₄ 28 šamáš AN-KU₁₀
 5' Á ULÙ ki TAB-ú
 6' 4 SI {x} GAR-an
 7' in 2 DANNA ME NIM-a
 8' SIG 13 AN-KU₁₀ sin BAR DIB
 9' in 15 ME ana ŠÚ šamáš
 10' APIN GE₆ 15 AN-KU₁₀ sin
 11' 5 ÁB BAR DIB
 12' in 45 GE₆ GIN
 13' 'GE₆ 29¹ AN-KU₁₀ šamáš
 14' [x] DIB in 1,31
 15' GE₆ GIN

II

- 1' 13 [x ŠÚ]
 2' 14 1 'ME a¹-[kam muš]
 3' 14 4,30 na 'muš¹
 4' 15 11 GE₆ muš
 5' 27 17 KUR muš
 6' ŠU 30 25 na-su SIG muš ana šamáš SIG
 7' 14 6,50 ME muš
 8' 14 3,20 ŠÚ muš
 9' 15 4 GE₆ muš
 10' 15 10 UŠna muš
 11' 28 13 KUR muš

III

- 1' 15 10+[xx]
 2' 27 [15] KUR muš
 3' APIN 30 12 a-kam muš ma-diš SIG
 4' 14 8,20 ŠÚ DIR muš
 5' [15] '2¹,30 ME DIR NU PAP
 6' '15¹ 7 na DIR muš
 7' 16 6 GE₆ DI[R muš]
 8' '28¹ 9,40 [KUR]
 9' ki P[AP] NU I[GI]

- 17 2 cubits [above] ζ Tauri. Night of the [x]+3rd, first part of the night, [....]
 18 1½ cubits [above μ] Geminorum. [....]

'Rev.

I

- 1' [Month XII, 'moonset to sunrise' (plus) 'sunrise to moonset': [....]
 2' 'moonrise to sunset' (plus) 'sunset to moonrise': 15° 40'
 (blank)
 3' Year 117.
 4' Month II, the 28th, solar eclipse;
 5' when it began on the south side,
 6' it made 4 fingers.
 7' At 2 bēru after sunrise.
 8' Month III, the 13th, lunar eclipse, BAR, omitted.
 9' At 15° before sunset.
 10' Month VIII, night of the 15th, lunar eclipse,
 11' (after) 5 months, BAR, omitted.
 12' At 45° after sunset.
 13' Night of the 29th, solar eclipse
 14' [....] omitted. At 91°
 15' after sunset.

II

- 1' The 13th, [moonset to sunrise:]
 2' The 14th, moonrise to sunset: 1°;
 3' The 14th, sunrise to moonset: 4° 30'; measured.
 4' The 15th, sunset to moonrise: 11°; measured.
 5' The 27th, moonrise to sunrise: 17°; measured.
 6' Month IV, (the 1st of which was identical with) the 30th (of the preceding month.)
 sunset to moonset: 25°; it was faint, measured; it was low to the sun.
 7' The 14th, moonrise to sunset: 6° 50'; measured.
 8' The 14th, moonset to sunrise: 3° 20'; measured.
 9' The 15th, sunset to moonrise: 4°; measured.
 10' The 15th, sunrise to moonset: 10°; measured.
 11' The 28th, moonrise to sunrise: 13°; measured.

III

- 1' The 15th, [....] 10+[x]
 2' The 27th, moonrise to sunrise: 15°; measured.
 3' Month VIII, (the 1st of which was identical with) the 30th (of the preceding month.)
 sunset to moonset: 12°; measured (despite) mist; it was very faint.
 4' The 14th, moonset to sunrise: 8° 20'; measured (despite) clouds.
 5' [The 15th,] moonrise to sunset: 1° 30'; clouds, I did not watch.
 6' The 15th, sunrise to moonset: 7°; measured (despite) clouds.
 7' The 16th, sunset to moonrise: 6°; clouds, [....]
 8' The 28th, [moonrise to sunrise:] 9° 40';
 9' when I watched I did not see it.

IV

- 1' 'x 10' UŠ¹ K[UR?]
 2' ŠE 30 12+[x]
 3' 12 8 [ŠÚ]
 4' 13 2,20+[x na]
 5' 14 2,40+[x ME]
 6' 15 15,10²G[E₆]
 7' [x] [1]⁸30 [KU]R 'DIR' x'
 8' [a-k]am u [DI]R NU PAP

Colophon

- 1 U₄-1-KAM IGI^{meš} [DI]B^{meš} 'u' [A]N-KU₁₀^{meš} šá ana MU-1-me-35-KAM 'Se-lu-ku
 LUGAL kun-nu-[u']

Comments

- Rev. I 3'-7': solar eclipse of -194 June 6.
 I 8'f.: lunar eclipse of -194 June 20.
 I 10'-12': lunar eclipse of -194 Nov 15.
 I 13'-15': solar eclipse of -194 Nov 29.
 III 2': [15] according to LBAT; now broken.

No. 32

BM 55560 (= 82-7-4, 150)

Listed as LBAT *1250

Photo:

Goal year: SE 135

Obv.:

- 1 [MU-1-šú]-'4'-KAM 'An-ti-u-uk-su 'LUGAL GU₄' 3 MÚL-BABBAR ana M[E E-a]
 2 [... ina IG]I MÚL e šá SAG GÍR-TAB UŠ APIN in 12 MÚL-BABBAR ina GÍR-[TAB
 ŠÚ]
 3 [...] 19 MÚL-BABBAR ana NIM ki UŠ-a^{sic} ár 4-ÀM [ár^m]eš šá PA [UŠ ŠE DIR]
 4 [MU-5]2 'An LUGAL BAR GE₆ 11 USAN MÚL-BABBAR ana ŠÚ ina LAL-šú ana
 MÚL e šá S[AG GÍR-TAB TE]
 5 [...] SIG MÚL e šá SAG GÍR-TAB 4 SI DU₆ GE₆ 8 USAN MÚL-BABBAR e SI₄ [nn
 mm]
 6 [MU-1-me-2]7 'Se-lu-ku LUGAL BAR GE₆ 4 ina ZÁLAG dele-bat SIG DUR nu-nu 4
 KÙŠ GE₆ 10 [...]
 7 [x (x) G]E₆ 14 ina ZÁLAG dele-bat SIG MÚL ár šá SAG HUN 6 KÙŠ GE₆ 30 ina
 ZÁLAG dele-bat SIG MÚL-[MÚL nn mm]

IV

- 1' [....]
 2' Month XII, (the 1st of which was identical with) the 30th (of the preceding month,
 sunset to moonset:) 12+[x°;]
 3' The 12th, [moonset to sunrise:] 8° [....]
 4' The 13th, [sunrise to moonset:] 2° 20+[x']
 5' The 14th, [moonrise to sunset:] 2° 40+[x']
 6' The 15th, [sunset to moonrise:] 15° 10' [....]
 7' [The xth, moonrise to sun]rise: 18° 30'; clouds?
 8' mist and clouds, I did not watch.

Colophon

- 1 First days, appearances, passages and eclipses which are established for year 135, king
 Seleucus.

No. 32

Obv.:

- 1 [Year 6]4, king Antiochus. Month II, the 3rd, Jupiter's acro[nychal rising]
 2 [...] it became stationary [...] in] front of β Scorp̄ii. Month VIII, around the 12th,
 Jupiter's [last appearance] in Scorpius
 3 [...] the 19th, when Jupiter became stationary to the east, [it became stationary]
 behind the four [rear] ones of Sagittarius. [Month XII was intercalary.]
 4 [Year 5]2, king Antiochus. Month I, night of the 11th, first part of the night, Jupiter,
 while moving back to the west, [came close] to β Scorp̄ii
 5 [...] 4 fingers below β Scorp̄ii. Month VII, night of the 8th, first part of the night,
 Jupiter was [...] above α Scorp̄ii.
 6 [Year 12]7, king Seleucus. Month I, night of the 4th, last part of the night, Venus was
 4 cubits below η Piscium. Night of the 10th, [...]
 7 [...] Night of the 14th, last part of the night, Venus was 6 cubits below α Arietis. Night
 of the 30th, last part of the night, Venus was [...] below η Tau[ri]

- 8 [e is l]e₁₀ 2 KŮŠ GE₆ 19 ina ZÁLAG dele-bat SIG šur SI 2 KŮŠ 'SIG' in 22 dele-bat [ina
NIM ina x ŠŮ....]
9 [...] 'x' na-su [APIN GE₆] '20 USAN' [...]

'Rev.

I broken;

II

- 1' [ŠŮ] 'ana šamaš SIG'
2' [14 6],50 ME 'muš'
3' [14 3],20 ŠŮ muš
4' [15] '4' GE₆ muš
5' [15] 10 UŠ na muš
6' [2]8 13 KUR muš

III

- 1' [APIN]
2' 14 8,20 ŠŮ muš'
3' 15 2,30 ME DIR NU PAP
4' 15 7 na DIR muš
5' 16 6² GE₆ DIR muš
6' 28 9¹,50 KUR a-kam ki PAP NU I[GI]

IV

1'-3' 10+[x]

Colophon

1 [...] m]eš DIB-bat^{meš} u AN-KU₁₀^{meš} šá a-na MU-1-me-35-KAM I[Se LUGAL kun-nu-u]

Comments

Obv. 3f.: restored from duplicate BM 34048 (No. 31).

Rev. ditto

Colophon: DIB-bat erroneously for DIB-qa.

- 8 2 cubits [above α] Tauri. Night of the 19th, last part of the night, Venus was 2 cubits
below β Tauri. Month III, around the 22nd, Venus' [last appearance in the east in]
9 [...] sunset to setting of Venus: [Month VIII, night] of the 20th, first part of the
night, [...]

'Rev.

I broken;

II

- 1' [Month IV,] it was low' to the sun.
2' [The 14th,] moonrise to sunset: [6°] 50'; measured.
3' [The 14th,] moonset to sunrise: [3°] 20'; measured.
4' [The 15th,] sunset to moonrise: 4°; measured.
5' [The 15th,] sunrise to moonset: 10°; measured.
6' [The 2]8th, moonrise to sunrise: 13°; measured.

III

- 1' [Month VIII,]
2' The 14th, moonset to sunrise: 8° 20'; measured.
3' The 15th, moonrise to sunset: 2° 30'; clouds, I did not watch.
4' The 15th, sunrise to moonset: 7°; measured (despite) clouds.
5' The 16th, sunset to moonrise: 6°²; measured (despite) clouds.
6' The 28th, moonrise to sunrise: 9°² 50'; mist, when I watched I did not see it.

IV

1'-3' The 10+[xth,]

Colophon

1 [...] passings, and eclipses, which were [established] for year 135, [king Seleucus.]

No. 33

BM 32986 (= 78-5-31,75)

Photo: Pl. 25

Goal year: SE 139

'Obv.'

- 1' [... ¹Se-lu]-ku² 'LUGAL² ŠU²¹ [...]
 2' [...] SIG 'UŠ¹ KIN 'in¹ [...]
 3' [... MÚL] KUR šá DUR nu-nu 'UŠ² ŠE¹ [...]
 4' [MU-5]'6¹-KAM ¹An LUGAL KIN DIR ZÍZ G[E₆²]
 5' [MU-1]-'me¹-31-KAM ¹Se LUGAL BAR GE₆ 5 U[SAN dele-bat]
 6' [...] šá še-pít MAŠ-MAŠ 1½ KÙŠ GE₆ 14 US[AN dele-bat]
 7' [...] 'KÙŠ¹ GE₆ 26 USAN dele-[bat]
 8' [...] '22²¹ U[SAN dele-bat]

'Rev.'

- I
 1' [...] 'x x x'
 2' [...] 'in¹ 30 ME NIM-a

Colophon

- 1 U₄-1-KAM I[GI-DUH-A^{meš}]
 2 ¹An-ti-['u-uk-su]

Comments

The obverse contains remnants of both Jupiter sections (lines 1-3 from year SE 68, and line 4 from year 56, respectively), and the Venus section.

Obv. 1': The last preserved sign may be ŠU; Jupiter's stationary point in the east did occur in month IV.

2': at the eastern stationary point, Jupiter was in the area of η Piscium, but (of course) below it, so the sign SIG before UŠ may be the end of a statement about this. A date in month VI refers to Jupiter's acronychal rising (lost in the break at the end of the line).

3': towards the end of month XII, Jupiter had its last appearance.

Rev.: solar eclipse of SE 121 XII = -189 March 14. A report of this eclipse is preserved as LBAT 1438, see vol. V No. 63. The timing of 30° after sunrise is the same in both reports. Unfortunately, I cannot really read line 1'; by comparison with LBAT 1438, the traces may be [al šal-šú] 'HAB-rat¹ DIR¹.

No. 33

'Obv.'

- 1' [...] king² [Seleu]cus². Month IV², [...]
 2' [...] it became stationary [...] low. Month VI, around [the xth,]
 3' [...] became stationary [...] η Piscium. Month XII, [...]
 4' [Year 5]6, king Antiochus. Month VI was intercalary. Month XI, ni[ght²]
 5' [Year 1]31, king Seleucus. Month I, night of the 5th, first [part of the night, Venus was]
 6' [...] 1½ cubits [...] η/μ] Geminorum. Night of the 14th, first part [of the night, Venus was]
 7' [...] cubit. Night of the 26th, first part of the night, Ve[nus]
 8' [...] night of the] 22nd, first [part of the night, Venus was]

'Rev.'

- I
 1' [...]
 2' [...] At 30° after sunrise.

Colophon

- 1 First days, app[earances,]
 2 [king] Anti[ochus]

Date

The date can be determined from the traces preserved in lines 4'f.: there are only very few years containing a month VI₂ with a king Antiochus; the correct one can be found from the appropriate year for Venus data in a year ending in 31, with a king Seleucus.

No. 34

BM 55533 (= 82-7-4,116)

Photo: Pl. 26f.

Goal year: SE 139

This tablet was brought to my attention by J. Steele.

'Obv.'

- 1' [...] 'x x x ina ZÁLAG¹ GU₄-UD 'SIG² x¹ [...]
 2' [...] ina ŠÚ¹ ina MAŠ-MAŠ IGI NU PAP GE₆ 26 USAN GU₄-UD S[IG [...]
 3' [...] SIG MAŠ-MAŠ ár¹ 2½ KÙŠ SIG GE₆ 9 USAN GU₄-UD e MÚL ár šá ALLA šá
 U[LÚ [...]
 4' [...] KÙŠ GE₆ 29 USAN GU₄-UD SIG LUGAL 1 'KÙŠ 2¹ SI Š[U [...]
 5' [...] GU₄-UD ina NIM ina TIL ALLA IGI NU PAP [x] 'x+5 GU₄-UD¹ ina NIM ina
 A ŠÚ [...]
 6' [...] ina ŠÚ UD-D]A IGI DIB in 25 GU₄-UD ina ŠÚ UD-DA ŠÚ-šú DIB [...]
 7' [...] 'x x x x x¹ ½ KÙŠ ina IGI dele-bat ana ŠÚ IGI KUR 'x¹ [...]
 8' [...] 'e² SI₄¹ 2¹ KÙŠ GAN '10+x¹ GU₄-UD ina NIM ina [x ŠÚ [...]
 9' [...] 'GU₄-UD ina ŠÚ ina zib^{me} ŠÚ DIR NU PAP i[n [...]
 10' [...] e LUGAL 6 SI ŠU GE₆ 11 USAN G[ENNA [...]
 11' [...] ŠÚ šá GENNA ina] A 'TA¹ [x x] 'ki PAP¹ NU IGI 'x¹ [...]

'Rev.'

I broken;

II

- 1' [G]U₄ 30 18 KUR₄ muš
 2' [1]4 7 ŠÚ DIR m[uš]
 3' 15 2,10 ME 'x x¹
 4' 15 1,30? 'na DIR muš²
 5' 16 16,30 G[E₆ x] muš
 6' [x] 9,10 KUR¹ DIR¹ NU PAP
 7' [SIG] 1¹ 20 KUR₄ a-pir DIR muš
 8' [x x M]E¹ a-kam muš
 9' [x x] 'x¹ DIR muš
 10' [x x x x] muš

III

- 1' 28 'x¹ 'x¹ [...]
 2' KIN 1 15,20¹ 'x¹ 'a-kam muš¹
 3' ana šámaš SIG
 4' 12? 10.30 ŠÚ DIR muš

No. 34

'Obv.'

- 1' [...] '....., last part of the night, Mercury was [...] below² [...]
 2' [...] first appearance [in the west] in Gemini; I did not watch. Night of the 26th, first
 part of the night, Mercury was [...] be[low]
 3' [...] 2½ cubits [below β Geminorum.] Month III, night of the 9th, first part of the
 night, Mercury was [...] above δ Cancr. [...]
 4' [...] cubits. Night of the 29th, first part of the night, Mercury was 1 cubit 2¹ fingers
 below α Leonis. Mon[th IV,]
 5' [...] Mercur[y's first appearance in the east in the end of Cancer; I did not watch. [...]
 the x+5th, Mercury's last appearance in the east in Leo. [...]
 6' [...] first appearance [in the west], omitted. Around the 25th, Mercury's last
 appearance in the west, omitted. [...]
 7' [...] first appearance, ½ cubit in front of Venus to the west; it was bright,
 [...]
 8' [...] 2¹ cubits above α Scorpii. Month IX, the 10+xth, Mercury's [last appearance] in
 the east in [...]
 9' [...] Mercury's last appearance in the west in Pisces; clouds, I did not watch. Ar[ound
]
 10' [...] 6 fingers above α Leonis. Month IV, night of the 11th, first part of the night,
 Sa[turn]
 11' [...] Saturn's last appearance in] Leo, from the [xth] when I watched I did not see it
 [...]

'Rev.'

I broken;

II

- 1' Month II, (the 1st of which was identical with) the 30th (of the preceding month,
 sunset to moonset:) 18°; it was bright, measured.
 2' The 14th, moonset to sunrise: 7°; measured (despite) clouds.
 3' The 15th, moonrise to sunset: 2° 10';
 4' The 15th, sunrise to moonset: 1° 30'; measured (despite) clouds.
 5' The 16th, sunset to moonrise: 16° 30'; measured [...]
 6' [The xth,] moonrise to sunrise: 9° 10'; clouds, I did not watch.
 7' [Month III,] the 1st (of which followed the 30th of the preceding month, sunset to
 moonset:) 20°; it was bright, earthshine; measured (despite) clouds.
 8' [The xth,] sunrise to moonset¹: [...], measured (despite) mist.
 9' [The xth,], measured (despite) clouds.
 10' [The xth,] measured.

III

- 1' The 28th, [...]
 2' Month VI, the 1st (of which followed the 30th of the preceding month, sunset to
 moonset:) 15° 20', measured (despite) mist;
 3' it was low to the sun.
 4' The 12th, moonset to sunrise: 10° 30'; measured (despite) clouds.

5'	13	4	ME DIR <i>muš</i>
6'	13	4	<i>na</i> DIR <i>muš</i>
7'	14	5	GE ₆ DIR <i>muš</i>
8'	27	14 ²	KUR <i>a-kam muš</i>
9'	DU ₆ 1	15	KUR ₄ <i>muš</i>
10'	<i>ina</i> GUB IGI <i>ana šámaš</i> SIG		
11'	12	3	ŠÚ ² <i>muš</i> ²
12'	'x' [...]		

IV

1'	AB [...]		
2'	[...]		
3'	12	7 ²	{ŠÚ [...]
4'	13	20	NINDA ² [<i>na</i> [...]
5'	14	[x	ME [...]
6'	15	[x	GE ₆ [...]
7'	27	15+	[x
8'	ZÍZ	30	[...]
9'	<i>i-šá</i> ² [...]		
10'	'x' [...]		

Date

The date can be found from the Saturn data: Saturn was observed passing α Leonis, and reached another star (or planet) on IV 11. A last appearance followed later in the same year. The only year that fits exactly is SE 80, yielding a Goal year of SE 139. This is confirmed by the Mercury data for SE 93. The month lengths on the reverse agree with computation for SE 121.

No. 35

BM 34579 + 36006 (Sp II 51 + Sp III 549)

Copies: LBAT 1251 (34579), 1252 (36006)

Bibliography: F. X. Kugler, SSB I (1907) 84-87 (34579); Pingree, Astral Sciences (1999) 170f.; L. Brack-Bernsen, SEAC 5th (1999) 22,34

Photo: Pl. 26f.

Goal year: SE 140

Obv.

1	[MU-1,9-KAM ¹ Se LU]GAL GU ₄ 3 MÚL-BABBAR <i>ina</i> HUN IGI TUR 12,30 <i>na-s</i> [<i>u</i> ¹ [...]		
2	[...] UŠ APIN 3 MÚL-BABBAR <i>ana</i> ME E-a AB EN 1 MÚL-BABBAR [...]		
3	[MU-56-KAM KIN]-DIR MU-57-KAM ¹ An LUGAL SIG GE ₆ 15 <i>ina</i> ZÁLAG MÚL-BABBAR <i>ina</i> [...]		
4	[... <i>ana</i>] ŠÚ <i>ina</i> LAL-šú SIG MÚL-MÚL 2 2/3 KÙŠ <i>šá šu-ut</i> KA ZÍZ GE ₆ 21 [...]		
5	[MU-1-me-3]2-KAM ¹ Se LUGAL BAR 15 ŠÚ <i>šá dele-bat</i> <i>ina</i> NIM <i>ina</i> HUN TA 14 <i>ki</i> PAP NU IGI ŠU [...]		

5'	The 13th,	moonrise to sunset: 4°; measured (despite) clouds.
6'	The 13th,	sunrise to moonset: 4°; measured (despite) clouds.
7'	The 14th,	sunset to moonrise: 5°; measured (despite) clouds.
8'	The 27th,	moonrise to sunrise: 14° ² ; measured (despite) mist.
9'	Month VII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 15°; it was bright, measured;	
10'	it could be seen while (the sun) stood there; it was low to the sun.	
11'	The 12th,	moonset to sunrise ¹ : 3°; measured.
12'	... [...]	

IV

1'	Month X, [...]	
2'	[...]	
3'	The 12th,	[moonset to sunrise:] 7° ² [...]
4'	The 13th,	[sunrise to moonset:] 20' [...]
5'	The 14th,	[moonrise to sunset: ...]
6'	The 15th,	[sunset to moonrise: ...]
7'	The 27th,	[moonrise to sunrise:] 15+x° [...]
8'	Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]	
9'	a little [...]	
10'	... [...]	

No. 35

Obv.

1	[Year 69,] king [Seleucus.] Month II, the 3rd, Jupiter's first appearance in Aries; it was small, rising of Jupiter to sunrise: 12° 30' [...]
2	became stationary [...] Month VIII, the 3rd, Jupiter's acronychal rising. Month X, until the 1st, Jupiter's [...]
3	[Year 56, month VI] was intercalary. Year 57, king Antiochus. Month III, night of the 15th, last part of the night, Jupiter in [...]
4	[...] while moving back to the west, was 2 2/3 cubits below η Tauri, according to oral information. Month XI, night of the 21st, [...]
5	[Year 13]2, king Seleucus. Month I, the 15th, Venus' last appearance in the east in Aries: from the 14th, when I watched I did not see it. Month IV, [...]

- 6 [x x x] in 1 IGI KIN GE₆ 7 USAN *dele-bat e* SA₄ šá ABSIN 1 KÜŠ GE₆ 25 USA[N]
 7 [GE₆ 2]9 USAN *dele-bat* SIG RÍN šá SI 3½ KÜŠ KIN-2-KAM GE₆ 10 USAN *dele-bat e*
 MÚL MURU[B₄ šá SAG GÍR-TAB nn mm *dele-bat*]
 8 4 SI *ana* NIM DIB GE₆ 16 USAN *dele-bat e* SI₄ 2 KÜŠ GE₆ 25 USAN *dele-bat e* MÚL
 KUR [šá KIR₄ šil PA nn mm]
 9 APIN GE₆ 1 USAN *dele-bat* SIG SI MÁŠ 2½ KÜŠ GE₆ 15 USAN *dele-bat e* MÚL IGI šá
 SUḪUR MÁŠ [nn mm]
 10 GE₆ 18 USAN *dele-bat e* MÚL ár šá SUḪUR MÁŠ 1 SI *dele-bat* 6 SI *ana* NIM DIB ZÍZ
 23 11 [na *dele-bat* x]
 11 *dele-bat ina* ŠÚ *ina* TIL *zib^{me}* ŠÚ 30 *dele-bat ina* NIM *ina* *zib^{me}* IGI KUR NIM-a 8 na-su
 in 29 IGI
-
- 12 MU-1,34-KAM ¹An LUGAL BAR 15 GU₄-UD *ina* NIM *ina* ḪUN ŠÚ DIR NU PAP
 GU₄ 19 GU₄-UD *ina* [ŠÚ *ina* x IGI]
 13 16 na-su in 17 IGI SIG GE₆ 1 USAN GU₄-UD SIG MAŠ-MAŠ IGI 3½ KÜŠ GE₆ 5¹
 [USAN GU₄-UD]
 14 SIG MAŠ-MAŠ ár 2½ KÜŠ GE₆ 17 USAN GU₄-UD e MÚL ár šá ALLA šá ULÙ 2 SI
 ŠU 2 [GU₄-UD *ina* ŠÚ *ina* ALLA ŠÚ]
 15 26 GU₄-UD *ina* NIM *ina* ALLA IGI 15 na-su in 25 IGI IZI 12 16 na GU₄-UD in [x GU₄-
 UD]
 16 *ina* NIM *ina* SAG A ŠÚ KIN-2-KAM 9 GU₄-UD *ina* ŠÚ UD-DA IGI DIB 23 GU₄-UD
ina ŠÚ UD-D[A ŠÚ-šú DIB]
 17 DU₆ 12 GU₄-UD *ina* NIM *ina* RÍN 1 ½ KÜŠ ár RÍN šá ULÙ *ana* NIM IGI 17 na-su in
 10 IGI G[E₆ x *ina* ZÁLAG]
 18 GU₄-UD SIG RÍN šá SI 2 2/3 KÜŠ APIN GE₆ 1 *ina* ZÁLAG GU₄-UD e MÚL e šá SAG
 GÍR-TAB 10 SI G[E₆ x *ina* ZÁLAG]
 19 GU₄-UD e SI₄ 3 ½ KÜŠ 21 GU₄-UD *ina* NIM *ina* PA ŠÚ NU PAP GAN 27 GU₄-UD
ina ŠÚ *ina* GU IGI N[U¹ PAP¹]
 20 AB 15 18 na GU₄-UD in 18 GU₄-UD *ina* ŠÚ *ina* GU ŠÚ ZÍZ 7 GU₄-UD *ina* NIM *ina*
 GU 2 KÜŠ [...]
 21 2/3 KÜŠ *ana* NIM DIB IGI 14,30 na-su ŠE 7 14 na GU₄-UD in 10 GU₄-UD *ina* NIM
ina *zib^{me}* [ŠÚ]

- 6 [...] (ideal) first appearance on the 1st. Month VI, night of the 7th, first part of the
 night, Venus was 1 cubit above α Virginis. Night of the 25th, first part of the night,
 [...]
 7 [Night of the 2]9th, first part of the night, Venus was 3½ cubits below β Librae.
 Month VI₂, night of the 10th, first part of the night, Venus was [...] above δ [Scorpii,
 Venus]
 8 having passed 4 fingers to the east. Night of the 16th, first part of the night, Venus
 was 2 cubits above α Scorpii. Night of the 25th, first part of the night, Venus was [...] above θ Ophi[uchi.]
 9 Month VIII, night of the 1st, first part of the night, Venus was 2½ cubits below β
 Capricorni. Night of the 15th, first part of the night, Venus was [...] above γ Capricorni.
 10 Night of the 18th, first part of the night, Venus was 1 finger above δ Capricorni, Venus
 having passed 6 fingers to the east. Month XI, the 23rd, [sunset to setting of Venus:]
 11°. The xth,]
 11 Venus' last appearance in the west in the end of Pisces. The 30th, Venus' first appearance
 in the east in Pisces; it was bright (and) high; rising of Venus to sunrise: 8°; (ideal) first
 appearance on the 29th.
-
- 12 Year 94, king Antiochus. Month I, the 15th, Mercury's last appearance in the east in
 Aries; clouds, I did not watch. Month II, the 19th, Mercury's [first appearance in the
 west in;]
 13 sunset to setting of Mercury: 16°; (ideal) first appearance on the 17th. Month III,
 night of the 1st, first part of the night, Mercury was 3½ cubits below α Geminorum.
 Night of the 5th¹, [first part of the night, Mercury was]
 14 2½ cubits below β Geminorum. Night of the 17th, first part of the night, Mercury was
 2 fingers above δ Cancri. Month IV, the 2nd, [Mercury's last appearance in the west in
 Cancer.]
 15 The 26th, Mercury's first appearance in the east in Cancer; rising of Mercury to sunrise:
 15°; (ideal) first appearance on the 25th. Month V, the 12th, rising of Mercury to
 sunrise: 16°. Around [the xth, Mercury's]
 16 last appearance in the east in the beginning of Leo. Month VI₂, the 9th, Mercury's first
 appearance in the west, omitted. The 23rd, Mercury's [last appearance] in the west
, [omitted.]
 17 Month VII, the 12th, Mercury's first appearance in the east in Libra. 1½ cubits behind
 α Librae to the east; rising of Mercury to sunrise: 17°; (ideal) first appearance on the
 10th. Ni[ght¹ of the xth, last part of the night,]
 18 Mercury was 2 2/3 cubits below β Librae. Month VIII, night of the 1st, last part of the
 night, Mercury was 10 fingers above β Scorpii. Ni[ght of the xth, last part of the
 night,]
 19 Mercury was 3½ cubits above α Scorpii. The 21st, Mercury's last appearance in the
 east in Sagittarius; I did not watch. Month IX, the 27th, Mercury's first appearance in
 the west in Aquarius; I did not¹ [watch¹.]
 20 Month X, the 15th, sunset to setting of Mercury: 18°. Around the 18th, Mercury's last
 appearance in the west in Aquarius. Month XI, the 7th, Mercury's first appearance in
 the east in Aquarius, 2 cubits [...]
 21 having passed 2/3 cubit to the east; rising of Mercury to sunrise: 14° 30'. Month XII,
 the 7th, rising of Mercury to sunrise: 14°. Around the 10th, Mercury's [last appearance]
 in the east in Pisces.

- 22 MU-1,20-KAM DIR-ŠE EN 25 GENNA *ana* ŠÚ *ki* UŠ-a 1½ KÙŠ *ina* IGI GIŠ.KUN A UŠ MU-1,2[1-KAM]
- 23 SIG GE₆ 22 USAN GENNA *ana* NIM *ina* LAL-šú SIG GIŠ.KUN A 4 KÙŠ ŠU 16 16 *na* GENNA *in* 18 [GENNA *ina* A ŠÚ]
- 24 IZI 25 GENNA *ina* TIL A IGI 16,30 *na-su in* 23 IGI KIN GE₆ 20 *ina* ZÁLAG GENNA *e* GÌR *ár* šá A [nn mm]
- 25 GAN EN 19 GENNA *ana* NIM *ki* UŠ-ú 2 KÙŠ 8 SI *ár* GÌR *ár* šá A UŠ ZÍZ 16 GENNA *ana* ME [E-a]
- 26 GE₆ 29 USAN GENNA *ana* ŠÚ *ina* LAL-šú *e* GÌR *ár* šá A 14 SI
-
- 27 [M]U-1-šu-1-KAM ¹An LUGAL DU₆ *in* EN 13 AN *ana* NIM *ki* <UŠ>-ú 2/3 KÙŠ *e* MÚL IGI šá š[e-pit MAŠ-MAŠ]
- 28 [x] SI *ana* ŠÚ LAL UŠ APIN 26 AN *ana* ME E-a GAN 27 AN *ina* MÚL-MÚL UŠ š[E DIR]
-
- 29 [MU-1,]33-[KAM] ¹An LUGAL GU₄ GE₆ 17 *ina* ZÁLAG AN SIG MÚL KUR šá DUR *nu-nu* 3½ KÙŠ [...]
- 30 SIG [MÚL] IGI šá SAG HUN 4 KÙŠ SIG GE₆ 6 ¹*ina* ZÁLAG¹ [AN SIG] ¹MÚL *ár* šá SAG HUN 4+[x¹ KÙŠ ŠU GE₆ x *ina* ZÁLAG AN]
- 31 SIG MÚL-MÚL 2 2/3 KÙŠ GE₆ 26 *ina* ZÁLAG AN *e* [...]
- 32 SIG šur GIGIR šá SI 2½ KÙŠ GE₆ 29 *ina* ZÁLAG AN [...]
- 33 *ana* ŠÚ *ina* LAL-šú *e* šur GIGIR šá ULÙ 1½ KÙŠ x [...]
- 34 AB¹ GE₆ 21 USAN AN *ana* NIM *ina* LAL-šú [...]
- 35 ¹*e* šur GIGIR šá ULÙ 2 KÙŠ GE₆ 23¹ [...]
- 36 [x] ¹MÚL *ár* šá š[e-pit MAŠ-MAŠ] 1 KÙŠ 8 SI ¹x¹ [...]

Edge

- 1 ¹SIG¹ MAŠ-MAŠ IGI ¹5¹[KÙŠ x x] ¹x x¹ 30¹ [...]

Rev.

I

- 1 [M]U-1-me-21-KAM ¹An LUGAL
- 2 [D]U₆ 15 ŠÚ *na*
- 3 6 ME GE₆
- 4 ¹APIN¹ 13 ŠÚ *na*
- 5 [] 8,40 ME GE₆
- 6 [GAN x] ŠÚ *na*
- 7 [x] ME GE₆
- 8 [AB x] ŠÚ *n*a
- 9 [x] ME] GE₆

- 22 Year 80. Month XII₂, until the 25th, when Saturn became stationary to the west, it became stationary 1½ cubits in front of θ Leonis. Year 8[1.]
- 23 Month III, night of the 22nd, first part of the night, Saturn, while moving back to the east, was 4 cubits below θ Leonis. Month IV, the 16th, sunset to setting of Saturn: 16°. Around the 18th, [Saturn's last appearance in Leo.]
- 24 Month V, the 25th, Saturn's first appearance in the end of Leo; rising of Saturn to sunrise: 16° 30'; (ideal) first appearance on the 23rd. Month VI, night of the 20th, last part of the night, Saturn was [...] above β Virginis.
- 25 Month IX, until the 19th, when Saturn became stationary to the east, it became stationary 2 cubits 8 fingers behind β Virginis. Month XI, the 16th, Saturn's acronychal [rising.]
- 26 Night of the 29th, first part of the night, Saturn, while moving back to the west, was 14 fingers above β Virginis.
-
- 27 Year 61, king Antiochus. Month VII, around until the 13th, when Mars became stationary to the east, it became stationary 2/3 cubit above η Geminorum,
- 28 being [x] fingers back to the west. Month VIII, the 26th, Mars' acronychal rising. Month IX, the 27th, Mars became stationary in Taurus. Month XII [was intercalary.]
-
- 29 [Year] 93, king Antiochus. Month II, night of the 17th, last part of the night, Mars was 3½ cubits below η Piscium [...]
- 30 4 cubits below β Arietis. Month III, night of the 6th, last part of the night, [Mars was] 4+[x cubits below] α Arietis. [Month IV, night of the xth, last part of the night, Mars was]
- 31 2 2/3 cubits below η Tauri. Night of the 26th, last part of the night, Mars was [...] above [α Tauri.]
- 32 2½ cubits below β Tauri. Night of the 29th, last part of the night, Mars was [...]
- 33 while moving back to the west, was 1½ cubits above ζ Tauri. ... [...]
- 34 Month X, night of the 21st, first part of the night, Mars, while moving back to the east, [...]
- 35 2 cubits above ζ Tauri. Night of the 23rd¹, [...]
- 36 1 cubit 8 fingers [...] μ Geminorum [...]

Lower edge

- 1 5¹ [cubits] below α Geminorum [...] 30¹ [...]

Rev.

I

- 1 Year 121, king Antiochus.
- 2 Month VII, 'moonset to sunrise' (plus) 'sunrise to moonset': 15°
- 3 'moonrise to sunset' (plus) 'sunset to moonrise': 6°
- 4 Month VIII, 'moonset to sunrise' (plus) 'sunrise to moonset': 13°
- 5 'moonrise to sunset' (plus) 'sunset to moonrise': 8° 40'
- 6 [Month IX,] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
- 7 'moonrise to sunset' (plus) 'sunset to moonrise': [...]
- 8 [Month X, 'moonset to sunrise' (plus) 'sunrise to moonset':]
- 9 'moonrise to sunset' (plus) 'sunset to moonrise': [...]

- 10 ZÍZ [x] ŠÚ *na*
 11 14,10 ME GE₆
 12 ŠE 6,30 ŠÚ *na*
 13 13,20 ME GE₆
-
- 14 MU-1-me-22-KAM ¹A_n LUGAL
 15 IZI GE₆ 14 1 ME DIR *m[uš]*
 16 *sin* TA DIR *ki* E-a 2 SI Á [MAR]
 17 *ana* ZÁLAG TAG₄ *in* 1 DANNA
 18 ME *ana* ŠÚ *šamáš* 28 AN-K[U₁₀ *šamáš*]
 19 *ki* PAP NU IGI (text: PAP) *in* 28
 20 'ME' *ana* ŠÚ *šamáš* AB 28
 21 AN-KU₁₀ *šamáš* 5 ÁB BAR DIB
 22 *in* 1,18 ME *ana* ŠÚ *šamáš*
 23 ZÍZ GE₆ 14 8 ME *a-kam muš*
 24 *sin* AN-KU₁₀ Á KUR *ki* TAB-ú
 25 *ina* 16 GE₆ *gab-bi* ŠÚ-*im*
 26 *ád* 'ŠÚ' *in* 34 GE₆ *ana* ZÁLAG

II

- 1 MU-1-me-21-KAM ¹A_n LUGAL]
 2 DIR 1 21 KUR₄ *a-p[ir x]*
 3 *ana šamáš* SIG
 4 14 5,30 [Š]Ú *muš*
 5 15 1+[x] ME *muš*
 6 15 [x] *n*a *muš*
 7 16 12 GE₆ *muš*
 8 27 16,40 KUR DIR NU PAP
 9 MU-1-me-22-KAM ¹A_n LUGAL
 10 BAR 30 14,10 DIR NU PAP
 11 15 11 ME *muš*
 12 15 4,40 ŠÚ *muš*
 13 16 6,40 GE₆ *muš*
 14 16 5,30 *na muš*
 15 [2]8 9,40 KUR DIR NU PAP
 16 [GU₄] 1 21 KUR₄ DIR *muš ana šamáš* NIM
 17 [14] 17,40 ME
 18 [14] x]+1 ŠÚ *muš*
 19 15 1,30 GE₆ *muš*
 20 15 2 *na muš*
 21 28 9 KUR *a-kam ki* PAP NU IGI
 22 SIG 30 13 SIG *muš ana šamáš* NIM
 23 15 2,30 ME *muš*

- 10 Month XI, 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 11 'moonrise to sunset' (plus) 'sunset to moonrise': 14° 10'
 12 Month XII, 'moonset to sunrise' (plus) 'sunrise to moonset': 6° 30'
 13 'moonrise to sunset' (plus) 'sunset to moonrise': 13° 20'
-
- 14 Year 122, king Antiochus.
 15 Month V, night of the 14th, moonrise to sunset: 1°, measured (despite) clouds.
 16 When the moon came out from a cloud, 2 fingers on the [west] side
 17 remained to clearing. At 1 *bēru*
 18 before sunset. The 28th, [solar] eclipse;
 19 when I watched I did not see it. At 28°
 20 before sunset. Month X, the 28th,
 21 solar eclipse, (after) 5 months, BAR, omitted.
 22 At 78° before sunset.
 23 Month XI, night of the 14th, moonrise to sunset: 8°, measured (despite) mist.
 24 Lunar eclipse: When it began on the east side,
 25 in 16° of night all was covered.
 26 It set eclipsed. At 34° before sunrise.

II

- 1 Year 121, [king] An[tiochus].
 2 Month XII₂, the 1st (of which followed the 30th of the preceding month), sunset to
 moonset: 21°; it was bright, earthshine, [...]
 3 it was low to the sun.
 4 The 14th, moonset to sunrise: 5° 30', measured.
 5 The 15th, moonrise to sunset: 1+[x° ...], measured.
 6 The 15th, sunrise to moonset: [...], measured.
 7 The 16th, sunset to moonrise: 12°, measured.
 8 The 27th, moonrise to sunrise: 16° 40'; clouds, I did not watch.
 9 Year 122, king Antiochus.
 10 Month I, (the 1st of which was identical to) the 30th (of the preceding month; sunset
 to moonset:) 14° 10'; clouds, I did not watch.
 11 The 15th, moonrise to sunset: 11°, measured.
 12 The 15th, moonset to sunrise: 4° 40', measured.
 13 The 16th, sunset to moonrise: 6° 40', measured.
 14 The 16th, sunrise to moonset: 5° 30', measured.
 15 The 28th, moonrise to sunrise: 9° 40'; clouds, I did not watch.
 16 [Month II,] the 1st (of which followed the 30th of the preceding month, sunset to
 moonset:) 21°; it was bright, measured (despite) clouds; it was high to the sun.
 17 [The 14th,] moonrise to sunset: 17° 40'
 18 [The 14th,] moonset to sunrise: [x]+1°, measured.
 19 The 15th, sunset to moonrise: 1° 30', measured.
 20 The 15th, sunrise to moonset: 2°, measured.
 21 The 28th, moonrise to sunrise: 9°; mist, when I watched I did not see it.
 22 Month III, (the 1st of which was identical with) the 30th (of the preceding month,
 sunset to moonset:) 13°; it was faint, measured; it was high to the sun.
 23 The 15th, moonrise to sunset: 2° 30', measured.

24	15	1	ŠÚ DIR <i>muš</i>
25	16	13	GE ₆ <i>muš</i>
26	16	15	<i>na muš</i>
27	28	13	KUR <i>mu[š]</i>
28	ŠU 1 15	KUR ₄ [x'] <i>muš</i>	
29	14	6+[x], 20+[x x]	<i>muš</i>
30	[x	x	x <i>m]uš</i>
31	[x	x	x <i>mu]š</i>

III

1	[IZ]I 1 10+[x]	
2	13	6,10+[x ŠÚ x]
3	14	1 ME D[IR ¹ <i>muš</i> ²]
4	14	9,30 <i>na</i> DI[R <i>muš</i> ²]
5	15	7 GE ₆ DIR <i>mu[š]</i>
6	27	16 KUR <i>muš</i>
7	KIN 1 11	<i>muš ana šamáš</i> SIG
8	12	10,40 ŠÚ DIR <i>muš</i>
9	13	8,50 ME DIR <i>muš</i>
10	13	2,30 <i>na muš</i>
11	14	4,40 GE ₆ <i>a-kam muš</i>
12	27	13 KUR DIR <i>muš</i>
13	DU ₆ 1 12	KUR ₄ <i>muš</i>
14		<i>ana šamáš</i> SIG
15	12	2,30 ŠÚ DIR <i>muš</i>
16	13	2,30 ME <i>a-kam muš</i>
17	13	13 <i>na muš</i>
18	14	4 GE ₆ <i>a-kam muš</i>
19	26	22 KUR DIR <i>muš</i>
20	APIN 30 8,50	<i>a-kam</i>
21		KALAG <i>sin</i> NU IGI
22	12	8,30 ŠÚ DIR <i>muš</i>
23	13	6 <i>na</i> DIR <i>muš</i>
24	14	40 NINDA ME DIR <i>muš</i>
25	15	9 GE ₆ DIR <i>muš</i>
26	27	13,30 KUR DIR <i>muš</i>

IV

1'	20+[x x	KUR]
2'	AB 30 10+[x]	
3'	<i>ina</i> GUB IGI	

24	The 15th,	moonset to sunrise: 1°, measured (despite) clouds.
25	The 16th,	sunset to moonrise: 13°, measured.
26	The 16th,	sunrise to moonset: 15°, measured.
27	The 28th,	moonrise to sunrise: 13°, measured.
28	Month IV, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	15°; it was bright, [...] measured.
29	The 14th,	6+[x°] 20+[x'], measured.
30	[...., measu]red.	
31	[...., measu]red.	

III

1	Month V, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	10+[x°]
2	The 13th,	[moonset to sunrise:] 6° 10+[x']
3	The 14th,	moonrise to sunset: 1°; [measured (despite) clou]ds.
4	The 14th,	sunrise to moonset: 9° 30', [measured (despite)] clouds.
5	The 15th,	sunset to moonrise: 7°, measured (despite) clouds
6	The 27th,	moonrise to sunrise: 16°, measured.
7	Month VI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	11°, measured; it was low to the sun.
8	The 12th,	moonset to sunrise: 10° 40', measured (despite) clouds.
9	The 13th,	moonrise to sunset: 8° 50', measured (despite) clouds.
10	The 13th,	sunrise to moonset: 2° 30', measured.
11	The 14th,	sunset to moonrise: 4° 40', measured (despite) mist.
12	The 27th,	moonrise to sunrise: 13°, measured (despite) clouds.
13	Month VII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	12°; it was bright, measured;
14	it was low to the sun.	
15	The 12th,	moonset to sunrise: 2° 30', measured (despite) clouds.
16	The 13th,	moonrise to sunset: 2° 30', measured (despite) mist.
17	The 13th,	sunrise to moonset: 13°, measured.
18	The 14th,	sunset to moonrise: 4°, measured (despite) mist.
19	The 26th,	moonrise to sunrise: 22°, measured (despite) clouds.
20	Month VIII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:)	8° 50'; dense mist,
21	I did not see the moon.	
22	The 12th,	moonset to sunrise: 8° 30', measured (despite) clouds.
23	The 13th,	sunrise to moonset: 6°, measured (despite) clouds.
24	The 14th,	moonrise to sunset: 40', measured (despite) clouds.
25	The 15th,	sunset to moonrise: 9°, measured (despite) clouds.
26	The 27th,	moonrise to sunrise: 13° 30', measured (despite) clouds.

IV

1'	The 20+[xth,	moonrise to sunrise:]
2'	Month X, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:)	10+[x°]
3'	it could be seen while (the sun) stood there.	

4'	12	7 ['] ŠÚ [...]
5'	13	3 n[a [...]
6'	13	30 NINDA M[E [...]
7'	14	15 G[E ₆ [...]
8'	27	12 KU[R [...]
9'	ZÍZ 30 14 KUR ₄ [...]	
10'	13	4,30 [ŠÚ [...]
11'	14	8 ME [...]
12'	14	2 [na [...]
13'	15	5 [GE ₆ [...]
14'	27	17 ['] KUR [...]
15'	ŠE 30 [...]	
16'	14	10+[x [...]
17'	15'	[...]

Upper edge

- 1 [U₄-1-KAM IGI]^{mes} DIB^{mes} u AN-[KU₁₀^{mes} šá ana MU-1-me-40-KAM]
 2 [A]n-ti²-u-uk-su u ¹An-t[i²-u-uk-su LUGAL^{mes} kun-nu-u]

Comments

There is probably a stamp seal impression on the left edge.

Obv. 18: 1 before SI is written with a horizontal wedge; it should be 10.

Obv. 20f.: At first appearance in the east, Mercury was in the relation given in the text to σ Aquarii.

Rev. I 19: correction to IGI is required by the terminology.

IV 4'-7': The sequence of day numbers (12-13-13-14) should correspond to a sequence ŠÚ - ME - na - GE₆, but the beginning of na is clear in line 5'.

No. 36

BM 35387 (Sp II 969)

Copy: LBAT 1253

Goal year: SE 142

Upper edge

- 1 [ina] 'a¹-mat ^dEN u ^dGAŠAN-ia liš-lim

Obv.

- 1 [M]U-1,11-KAM ¹Se LUGAL [...]
 2 [ŠU x]+1 MÚL-BABBAR ina ALLA 8 SI SIG *dele-bat* 4 SI ana ŠÚ LAL IGI 22' na-s[u]
 3 [in] 29 šá ^{itu}SIG IGI APIN EN 2 MÚL-BABBAR ana NIM ki UŠ-ú 2 KÙŠ
 4 [x MÚ]L ár šá ALLA šá ULÙ UŠ AB 2 MÚL-BABBAR ana ME E-a ŠE in EN 2
 5 'MÚL-BABBAR' ana ŠÚ ki UŠ-a 2 KÙŠ ina IGI MÚL ár šá ALLA šá ULÙ UŠ

- 4' The 12th, [moonset to sunrise:] 7° [...]
 5' The 13th, sunrise [to moonset:] 3° [...]
 6' The 13th, moonrise to sunset: 30' [...]
 7' The 14th, sunset to moonrise: 15° [...]
 8' The 27th, moonrise to sunrise: 12° [...]
 9' Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 14°; it was bright [...]
 10' The 13th, [moonset to sunrise:] 4° 30' [...]
 11' The 14th, moonrise to sunset: 8° [...]
 12' The 14th, [sunrise to moonset:] 2° [...]
 13' The 15th, [sunset to moonrise:] 5° [...]
 14' The 27th, [moonrise to sunrise:] 17° [...]
 15' Month XII, (the 1st of which was identical with) the 30th (of the preceding month), [...]
 16' The 14th, [...] 10+[x° [...]
 17' The 15th', [...]

Upper edge

- 1 [First days, appearance]es, passings and eclip[ses which were established for year 140,]
 2 [kings] Antiochus and Ant[iochus.]

No. 36

Upper edge

- 1 [At] the command of Bel and Beltija may it go well.

Obv.

- 1 [Y]ear 71, king Seleucus. [...]
 2 [Month IV, the x]+1st, Jupiter's first appearance in Cancer, 8 fingers below Venus, being 4 fingers back to the west; rising of Jupiter to sunrise: 22°¹;
 3 (ideal) first appearance [on] the 29th of month III. Month VIII, until the 2nd, when Jupiter became stationary to the east, it became stationary 2 cubits
 4 [...] δ Cancri. Month X, the 2nd, Jupiter's acronychal rising. Month XII, around until the 2nd,
 5 when Jupiter became stationary to the west, it became stationary 2 cubits in front of δ Cancri.

- 6 MU-59-KAM ¹An LUGAL BAR GE₆ 16 USAN MÚL-BABBAR e MAŠ-MAŠ šá SIPA 3½ KÙŠ
- 7 IZI GE₆ 24 ina ZÁLAG MÚL-BABBAR e MÚL IGI šá ALLA šá ULÙ ½ KÙŠ GE₆ 28 ina ZÁLAG MÚL-BABBAR
- 8 SIG MÚL IGI šá ALLA šá SI ½ KÙŠ GAN GE₆ 12 USAN MÚL-BABBAR SIG MÚL IGI šá ALLA šá SI 20 SI
-
- 9 MU-1-me-34-KAM ¹Se LUGAL BAR GE₆ 8 USAN *dele-bat e is le*₁₀ 2 2/3 KÙŠ
- 10 GE₆ 17 USAN *dele-bat e šur* GIGIR šá SI 1 KÙŠ GE₆ 20 USAN *dele-bat e šur* GIGIR šá ULÙ
- 11 {šá ULÙ} 1 KÙŠ GE₆ 26 USAN *dele-bat e* MÚL IGI šá še-pít MAŠ-MAŠ 1 KÙŠ *dele-bat* 6 SI ana ŠÚ LAL
- 12 GE₆ 28 USAN *dele-bat e* MÚL ár šá še-pít MAŠ-MAŠ 1 KÙŠ GU₄ GE₆ 2 USAN *dele-bat* e MAŠ-MAŠ šá SIPA 4 KÙŠ *dele-bat* 6 SI ana NIM DIB GE₆ 11 USAN *dele-bat* SIG MAŠ-MAŠ IGI
- 13 3 KÙŠ GE₆ 15 USAN *dele-bat* SIG MAŠ-MAŠ ár 2 KÙŠ GE₆ 27 USAN *dele-bat e* MÚL ár² šá ALLA šá ULÙ
- 14 1 KÙŠ SIG GE₆ 7 USAN *dele-bat* SIG SAG A 3½ KÙŠ GE₆ 30 USAN *dele-bat* SIG GIŠ.KUN A 4½ KÙŠ ŠU GE₆ 11 USAN *dele-bat* SIG ĠIR ár šá A 2 SI IZI GE₆ 8 USAN *dele-bat e* SA₄ šá ABSIN 2 SI *dele-bat* 2 SI ana NIM DIB KIN <GE₆> 7 USAN *dele-bat*
- 15 SIG RÍN šá SI 3½ KÙŠ APIN GE₆ 27 ina ZÁLAG *dele-bat e* RÍN šá ULÙ ½ KÙŠ GAN GE₆ 5
- 16 ina ZÁLAG *dele-bat* SIG RÍN šá SI 2½ KÙŠ GE₆ 21 ina ZÁLAG *dele-bat e* MÚL e šá SAG ĠIR-TAB 1 KÙŠ
- 17 GE₆ 28 ina ZÁLAG *dele-bat e* SI₄ 2½ KÙŠ AB GE₆ 9 ina ZÁLAG *dele-bat e* MÚL KUR šá KIR₄ šil PA 2 KÙŠ
- 18 'ZÍZ' GE₆ 17 ina ZÁLAG *dele-bat* SIG SI MÁŠ 1½ KÙŠ ŠE GE₆ 2 ina ZÁLAG *dele-bat e* MÚL IGI šá SUĤUR MÁŠ 1 KÙŠ 8 SI
- 19 [GE₆] 4 ina ZÁLAG *dele-bat e* MÚL ár šá SUĤUR MÁŠ 1 KÙŠ 8 SI

Rev.

- 1 [MU-1.36-KAM ¹An LUGAL BAR 7 GU₄-UD ina MÚL-MÚL IGI NU PAP GE₆ 15 USAN GU₄-U[D]
- 2 [....] ŠÚ² LAL² GE₆ 23 USAN GU₄-UD
(rest uninscribed)

Comments

Obv. 10: Venus must be below β Tauri; there seems to be confusion with the following entry.

- 6 Year 59, king Antiochus. Month I, night of the 16th, first part of the night, Jupiter was 3½ cubits above γ Geminorum.
- 7 Month V, night of the 24th, last part of the night, Jupiter was ½ cubit above θ Cancri. Night of the 28th, last part of the night, Jupiter was
- 8 ½ cubit below η Cancri. Month IX, night of the 12th, first part of the night, Jupiter was 20 fingers below η Cancri.
-
- 9 Year 134, king Seleucus. Month I, night of the 8th, first part of the night, Venus was 2 2/3 cubits above α Tauri.
- 10 Night of the 17th, first part of the night, Venus was 1 cubit above^{sic} β Tauri. Night of the 20th, first part of the night, Venus was 1 cubit above ζ Tauri.
- 11 Night of the 26th, first part of the night, Venus was 1 cubit above η Geminorum, Venus being 6 fingers back to the west.
- 12 Night of the 28th, first part of the night, Venus was 1 cubit above μ Geminorum. Month II, night of the 2nd, first part of the night, Venus was
- 13 4 cubits above γ Geminorum, Venus having passed 6 fingers to the east. Night of the 11th, first part of the night, Venus was 3 cubits below α Geminorum.
- 14 Night of the 15th, first part of the night, Venus was 2 cubits below β Geminorum. Night of the 27th, first part of the night, Venus was 1 cubit above δ² Cancri.
- 15 Month III, night of the 7th, first part of the night, Venus was 3½ cubits below ε Leonis. Night of the 30th, first part of the night, Venus was
- 16 4½ cubits below θ Leonis. Month IV, night of the 11th, first part of the night, Venus was 2 fingers below β Leonis. Month V, night of the 8th,
- 17 first part of the night, Venus was 2 fingers above α Virginis, Venus having passed 2 fingers to the east. Month VI, <night> of the 7th, first part of the night, Venus was
- 18 3½ cubits below β Librae. Month VIII, night of the 27th, last part of the night, Venus was ½ cubit above α Librae. Month IX, night of the 5th,
- 19 last part of the night, Venus was 2½ cubits below β Librae. Night of the 21st, last part of the night, Venus was 1 cubit above β Scorpil.
- 20 Night of the 28th, last part of the night, Venus was 2½ cubits above α Scorpil. Month X, night of the 9th, last part of the night, Venus was 2 cubits above θ Ophiuchi.
- 21 Month XI, night of the 17th, last part of the night, Venus was 1½ cubits below β Capricorni. Month XII, night of the 2nd, last part of the night, Venus was 1 cubit 8 fingers above γ Capricorni.
- 22 [Night] of the 4th, last part of the night, Venus was 1 cubit 8 fingers above δ Capricorni.

Rev.

- 1 [Year 96,] king Antiochus. Month I, the 7th, Mercury's first appearance in Taurus; I did not watch. Night of the 15th, first part of the night, Mercury [....]
- 2 [....] back² to the west². Night of the 23rd, first part of the night, Mercury
(rest uninscribed)

No. 37

BM 55515 + 55521 (= 82-7-4, 94 + 102)

Listed as LBA *1254 and *1255

Photo: Pl. 28

Goal-year: SE 142

'Obv.

- 1' [...] 'x' [...]
 2' [...] *ina* ZÁLAG *dele*-bat e MÚL e šá S[AG GÍR-TAB [...]
 3' [ZÍZ GE₆] 17 *ina* ZÁLAG *dele*-bat SIG SI MÁŠ 1½ KÜŠ [...]
 4' [MU]-1-me-35-KAM ¹Se LUGAL BAR GE₆ 2 *ina* ZÁLAG¹ [...]
-
- 5' [M]U-1,36-KAM ¹An LUGAL BAR 7 GU₄-UD *ina* ŠÚ *ina* MÚL-MÚL [IGI [...]
 6' [SI]G šur GIGIR šá SI 1 KÜŠ 8 SI GE₆ 25 USAN GU₄-UD 'e' š[ur GIGIR šá ULÚ [...]
 7' 13 GU₄-UD *ina* ŠÚ *ina* MAŠ-MAŠ ŠÚ NU PAP SIG 21 GU₄-UD *ina* NIM *ina* MAŠ-
 MAŠ *ár dele*-bat 1 [KÜŠ [...]
 8' ŠU 7 GU₄-UD *ina* NIM *ina* MAŠ-MAŠ ŠÚ NU PAP IZI 11 GU₄-UD *ina* ŠÚ *ina* TIL A
 IG[I [...]
 9' KIN 1 15 *na* GU₄-UD *in* 6 GU₄-UD *ina* ŠÚ *ina* TIL ABSIN ŠÚ DU₆ 2 GU₄-UD *ina*
 [NIM *ina* ABSIN IGI [...]
 10' 28 17² *na* šá GU₄-UD APIN *in* 2 GU₄-UD *ina* NIM *ina* RÍN ŠÚ NU PAP GAN 18 GU₄-
 UD [*ina* ŠÚ *ina* MÁŠ IGI [...]
 11' 21¹ GU₄-UD *ina* NIM *ina* MÁŠ² IGI NU PAP ZÍZ GE₆ 5² *ina* ZÁLAG GU₄-UD SIG SI
 MÁŠ 2½ KÜŠ [x x] 'x' [...]
 12' GE₆ 14 USAN GU₄-UD SIG MÚL-MÚL ½ KÜŠ GE₆ 23 USAN GU₄-UD [e] *is* le₁₀ 4
 K[ÜŠ [...]
-
- 13' MU-1,23-KAM ¹Se LUGAL GU₄ *in* EN 11 GENNA *ana* ŠÚ *ki* UŠ-a 1½ KÜŠ *ina* I[GI]
 DELE šá IGI ABSIN UŠ NU PAP ŠU GE₆ 'x' [USAN GENNA SIG DELE šá IGI
 ABSIN nn mm]
 14' KIN *in* 1¹ GENNA *ina* ABSIN ŠÚ DU₆ 12 GENNA *ina* ABSIN IGI 18² *na-su in* 10
 IGI GAN GE₆ 5² *ina* ZÁLAG GENNA e SA₄ [...]
 15' *ana* NIM *ki* UŠ-ú 1 KÜŠ 8 SI *ár* SA₄ šá ABSIN 2 KÜŠ *ana* SI NIM UŠ NU PAP [ŠE]
 GE₆ 22² *ina* ZÁLAG GENNA e SA₄ šá ABSIN 2 KÜŠ 'ŠE' [DIR]
-
- 16' [MU]-1-šu-3-KAM ¹'An¹ LUGAL APIN *in* 8 AN *ana* NIM *ki* UŠ-ú 2/3 KÜŠ *ár* MÚL *ár*
 šá 'ALLA' šá SI UŠ GAN *in* 25² AN *ana* ME E-a AB *in* 28 A[N [...]

No. 37

'Obv.

- 1' [...] ... [...]
 2' [...] last part of the night, Ve]nus was [...] above β Scorpii [...]
 3' [Month XI, night] of the 17th, last part of the night, Venus was 1½ cubits below β
 Capricorni [...]
 4' [Year] 135. king Seleucus. Month I, night of the 2nd, last part of the night, [...]
-
- 5' [Y]ear 96, king Antiochus. Month I, the 7th, Mercury's [first appearance] in the west
 in Taurus [...]
 6' 1 cubit 8 fingers below β Tauri. Night of the 25th, first part of the night, Mercury
 was [...] above ζ [Tauri [...]
 7' The 13th, Mercury's last appearance in the west in Gemini; I did not watch. Month
 III, the 21st, Mercury's [first appearance] in the east in Gemini, 1 [cubit] behind
 Venus [...]
 8' Month IV, the 7th, Mercury's last appearance in the east in Gemini; I did not watch.
 Month V, the 11th, Mercury's first appearance in the west in the end of Leo [...]
 9' Month VI, the 1st, sunset to setting of Mercury: 15°. Around the 6th, Mercury's last
 appearance in the west in the end of Virgo. Month VII, the 2nd, Mercury's [first
 appearance] in [the east in Virgo [...]
 10' The 28th, rising of Mercury to sunrise: 17°². Around the 2nd, Mercury's last
 appearance in the east in Libra; I did not watch. Month IX, the 18th, Mercury's
 [first appearance in the west in Capricorn [...]
 11' The 21st², Mercury's first appearance in the east in Capricorn; I did not watch.
 Month XI, night of the 5th², last part of the night, Mercury was 2½ cubits below β
 Capricorni [...] ... [...]
 12' Night of the 14th, first part of the night, Mercury was ½ cubit below η Tauri. Night
 of the 23rd, first part of the night, Mercury was 4 cubits [above] α Tauri [...]
-
- 13' Year 83, king Seleucus. Month II, around until the 11th, when Saturn became
 stationary to the west, it became stationary 1½ cubits in front of γ Virginis; I did
 not watch. Month IV, night of the xth, [first part of the night, Saturn was below
 γ Virginis.]
 14' Month VI, around the 1st², Saturn's last appearance in Virgo. Month VII, the 12th,
 Saturn's first appearance in Virgo; rising of Saturn to sunrise: 18°²; (ideal) first
 appearance on the 10th. Month IX, night of the 5th², last part of the night, Saturn
 was [...] above α [Virginis [...]
 15' when [Saturn] became stationary to the east, it became stationary 1 cubit 8 fingers
 behind α Virginis, being 2 cubits high to the north; I did not watch. [Month XII,]
 night of the 22nd, last part of the night, Saturn was 2 cubits above α Virginis.
 Month XII [was intercalary.]
-
- 16' [Year 63,] king Antiochus. Month VIII, around the 8th, when Mars became
 stationary to the east, it became stationary 2/3 cubit behind γ Cancri. Month IX,
 around the 25th², Mars' acronychal rising. Month X, around the 28th, [when] Mars
 [became stationary [...]

- 17' [MU-1,35-KAM] 'x x' [ina ZÁLAG AN SIG MÚL KUR šá D]UR nu-nu '4' KÙŠ' GE₆ 28 ina ZÁLAG AN SIG MÚL IGI šá SAG HUN 5 KÙŠ GU₄ GE₆ 4 ina ZÁLAG AN SIG MÚL á[r šá SAG HUN nn mm]
- 18' [....] ŠU GE₆ 7 ina ZÁLAG AN SIG šur GIGIR šá SI 2½ KÙŠ GE₆ 12 ina ZÁLAG AN e šur GIGIR šá UL[Û]
- 19' [.... ina ZÁLAG AN e MÚ]L ár šá še-pít MAŠ-MAŠ 6 SI IZI GE₆ 6' ina ZÁLAG AN e MAŠ-MAŠ šá SIPA 3 KÙŠ [....]
- 20' [.... K]ÙŠ KIN GE₆ 23 ina ZÁLAG AN SIG MÚL IGI šá ALLA šá SI 2 SI DU₆ ' [....]
- 21' [.... A]N e MÚL ár šá ALLA šá ULÛ ½ KÙŠ GE₆ 28 ina ZÁLAG AN e MÚL IGI šá A[LLA]
- 22' [.... GE₆ x]+5 USAN AN ana NIM ina LAL-šú SIG MAŠ-MAŠ ár 2½ KÙŠ ŠE GE₆ 11 USAN A[N]
- 23' [.... U]SAN AN ana NIM ina LAL-šú e MÚL ár šá ALLA šá SI 1 SI TE

Rev.

I

- 1' [.... ŠÚ n]a
- 2' [.... ME G]E₆
- 3' [.... ŠÚ] na
- 4' [.... ME] GE₆
- 5' [MU-1-me-24-KAM ¹A]n u ¹Se
- 6' [A]-šú LUGAL^{meš}
- 7' [....] 'x ME² ' muš
- 8' [....] 'x' la
- 9' [.... ana ZÁLAG]-ru ki TAB-ú
- 10' [....] MAR GIN 1 UŠ² ár²
- 11' [....] 'x x'

II

- 1 [MU-1-me-23-KAM] ¹An u ¹Se
- 2 [A-šú LU]GAL^{meš}
- 3 [.... D]IR NU PAP
- 4 [....] NU PAP
- 5 [....] muš
- 6 [....] GE₆
- 7 [....] muš
- 8 [....] DIR muš
- 9 MU-1-me-24-[KAM ¹A]n u ¹Se
- 10 'A¹-[šú] LUGAL^{meš}
- 11 BAR 30 22 [....]
- 12 14 8' [ME]
- 13 14 5' Š[Ú]

- 17' [Year 95,] [last part of the night, Mars was] 4? cubits [below η Pis]cium. Night of the 28th, last part of the night, Mars was 5 cubits below β Arietis. Month II, night of the 4th, last part of the night, Mars was [....] below α [Arietis]
- 18' [....] Month IV, night of the 7th, last part of the night, Mars was 2½ cubits below β Tauri. Night of the 12th, last part of the night, Mars was [....] above ζ Tauri [....]
- 19' [.... last part of the night, Mars was] 6 fingers [above] μ Geminorum. Month V, night of the 6th², last part of the night, Mars was 3 cubits above γ Geminorum [....]
- 20' [.... cu]bits. Month VI, night of the 23rd, last part of the night, Mars was 2 fingers below η Cancri. Month VII², [....]
- 21' [.... M]ars was ½ cubit above δ Cancri. Night of the 28th, last part of the night, Mars was [....] above η/θ Can[cri]
- 22' [.... Night of the x]+5th, first part of the night, Mars, while moving back to the east, was 2½ cubits below β Geminorum. Month XII, night of the 11th, first part of the night, Mars was [....]
- 23' [.... fir]st part of the night, Mars, while moving back to the east, was 1 finger above γ Cancri; it came close.

Rev.

I

- 1' [.... 'moonset to sunrise' (plus) 'sunrise' to moonset': [....]
- 2' [.... 'moonrise to sunset' (plus) 'sunset' to moonrise': [....]
- 3' [.... 'moonset to sunrise' (plus)] 'moonset to sunrise': [....]
- 4' [.... 'moonrise to sunset' (plus)] 'sunset to moonrise': [....]
- 5' [Year 124,] kings Antiochus and
- 6' his [son] Seleucus.
- 7' [....] moonrise to sunset²: [....]; measured.
- 8' [....]
- 9' [....] when it began to [clear,]
- 10' [....] the west wind blew. 1°² behind²
- 11' [....]

II

- 1 [Year 123,] kings Antiochus and
- 2 [his son] Seleucus.
- 3 [.... cl]ouds, I did not watch.
- 4 [....] I did not watch.
- 5 [....] measured.
- 6 [....] sunset to moonrise: [....]
- 7 [....] measured.
- 8 [....] measured (despite) clouds.
- 9 Year 124, kings Antiochus and
- 10 [his] son Seleucus.
- 11 Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 22° [....]
- 12 The 14th, [moonrise to sunset:] 8°² [....]
- 13 The 14th, moonset to sunrise: 5°² [....]

14	15	5 ²	G[E ₆]
15	15	4,20	n[a]
16	27 ²	17,30	K[UR]
17	GU ₄ 30 16	na-su	N[U PAP]
18	14	10 UŠ	ŠÚ ²
19	15	40	NINDA ME [....]
20	15	'1,40 ²¹	[na]
21	16	2+[x	GE ₆]

III

1	ŠU 30 12 ²	SIG	muš ma-diš
2		ana šámaš	SIG
3	14	10,30	ŠÚ NU PAP
4	15	5	ME a-kam muš
5	15	6	na a-kam muš
6	16	7	GE ₆ NU PAP
7	27	20,30	KUR muš
8	IZI 1 12	KUR ₄ a-kam muš	
9		ana šámaš	SIG
10	14	30	NINDA ŠÚ a-kam muš
11	15	2	ME a-kam muš
12	[1]5	16,30	na muš
13	[16]	6	GE ₆ a-kam m[uš]
14	[x]	14	KUR 'DIR' [....]
15	[x]	'x'	[....]

IV

1	APIN 3[0]	
2	13	'x' [ŠÚ]
3	14	'x' [ME]
4	14	10+[x na]
5	15	[x GE ₆]
6	27	15+[x]
7	GAN 1 19 ²	KUR ₄ a-[kam muš ²]
8	12	10,50 ŠÚ [....]
9	13	10,50 ME [....]
10	13	6+[x na]
11	14	'x' [GE ₆]

Comments

Obv. 20'ff.: Computation does not agree well with the dates in these lines; the dates found by means of Tuckerman's tables are a few days later than in the text. In addition, Mars was below γ Cancri when it passed it (line 23').

Rev. I 7'ff.: these lines may refer to the solar eclipse of -187 July 17.

14	The 15th,	sunset [to moonrise:] 5° ² [....]
15	The 15th,	sunrise [to moonset:] 4° 20' [....]
16	The 27th ² ,	moonrise to sunrise: 17° 30' [....]
17	Month II, (the 1st of which was identical with) the 30th (of the preceding month,)	sunset to moonset: 16°; I did no[t watch.]
18	The 14th,	moonset to sunrise: 10°.
19	The 15th,	moonrise to sunset: 40' [....]
20	The 15th,	[sunrise to moonset:] 1° 40' ² [....]
21	The 16th,	[sunset to moonrise:] 2+[x°]

III

1

Month IV, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 12°; it was faint, measured;

2

it was very low to the sun.

3

The 14th, moonset to sunrise: 10° 30'; I did not watch.

4

The 15th, moonrise to sunset: 5°; measured (despite) mist.

5

The 15th, sunrise to moonset: 6°; measured (despite) mist.

6

The 16th, sunset to moonrise: 7°; I did not watch.

7

The 27th, moonrise to sunrise: 20° 30'; measured.

8

Month V, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 12°; it was bright; measured (despite) mist;

9

it was low to the sun.

10

The 14th, moonset to sunrise: 30'; measured (despite) mist.

11

The 15th, moonrise to sunset: 2°; measured (despite) mist.

12

[The 1]5th, sunrise to moonset: 16° 30'; measured.

13

[The 16th,] sunset to moonrise: 6°; measured (despite) mist.

14

[The xth,] moonrise to sunrise: 14°; clouds, [...]

15

[....] [...]

IV

1	Month VIII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [....]
2	The 13th, [moonset to sunrise:] ... [....]
3	The 14th, [moonrise to sunset:] ... [....]
4	The 14th, [sunrise to moonset:] 10+[x°]
5	The 15th, [sunset to moonrise:]
6	The 27th, [moonrise to sunrise:] 15+[x°]
7	Month IX, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 19° ² ; it was bright, [measured ² (despite)] mi[st]
8	The 12th, moonset to sunrise: 10° 50' [....]
9	The 13th, moonrise to sunset: 10° 50' [....]
10	The 13th, [sunrise to moonset:] 6+[x°]
11	The 14th, [sunset to moonrise:] ... [....]

No. 38

BM 41072 (= 81-4-28,619)

Photo: Pl. 28

Goal year: SE 142'

Flake

- 1 (traces)
- 2 [...] 'x' APIN EN 2 [...]
- 3 [...] *ana* ME] 'E'-a ŠE in EN 2 [...]
- 4 [...] G]E₆ 16 USAN MÚL-BA[BBAR [...]
- 5 [...] MÚ]L *ár šá* ALLA *šá* ULÙ 1 [...]
- 6 [...] *e i*]s le₁₀ 2 2/3 K[ÙŠ [...]
- 7 [...] 'ana' NIM 'DIB' x' [...]
- 8 [...] 'x x' 1 K[ÙŠ' [...]
- 9 [...] *dele*]-bat SIG [...]
- 10 [...] *dele-b*]at e [...]

Date

Only a few years are possible for the Jupiter data in lines 1-5; for the first paragraph I find SE 0, 71, 95, 166. Taking into account that Venus is 2 2/3 cubits above α Tauri, the most likely Goal year seems to me SE 142, assigning lines 1-3 to SE 71, lines 4f. to SE 59, and lines 6ff. to SE 134. BM 35387 for the Goal year SE 142 shows remarkable agreement. But too little is preserved of the text to be certain about the date.

No. 39

BM 33823 (= Rm IV 383)

Listed as LBA T *1256

Photo: Pl. 29f.

Goal-year: SE 144

Obv.

- 1 [MU-1,13-KAM x] in' 21' MÚL-BABBAR [*ina* x ŠÚ [...]
- 2 [...] in 22 IGI GAN in EN 24 MÚL-BABBAR *ana* N[IM *ki* UŠ-ú [...]
- 3 [...] 2]'5' MÚL-BABBAR *ana* ME E-a
- 4 [MU-1-8]u-1-KAM 'An LUGAL SIG GE 9 USAN MÚL-BABBAR e 'MÚL' [TUR *šá* 4] KÚŠ [*ár* LUGAL nn mm (...)]
- 5 [GE₆ x *ina* ZÁLAG M]ÚL-BABBAR e GÌR *ár šá* A 2 SI DIM₄ GAN GE₆ 15 '*ina* ZÁLAG MÚL-BABBAR SIG DELE *šá* IGI ABSIN' [...]
- 6 [*ina*] ZÁLAG MÚL-BABBAR *ana* ŠÚ *ina* LAL-šú SIG DELE *šá* IGI ABSIN 14 SI

No. 38

Flake

- 1 (traces)
- 2 [...] Month VIII, until the 2nd, [...]
- 3 [...] acronychal] rising. Month XII, around until the 2nd, [...]
- 4 [...] Ni]ght' of the 16th, first part of the night, Jupi[ter]
- 5 [...] 1 [...] δ Cancr. [...]
- 6 [...] 2 2/3 cubits [above] α Tauri. [...]
- 7 [...] having passed [...] to the east. [...]
- 8 [...] 1 cu[bit' [...]
- 9 [...] Ve]nus was [...] below [...]
- 10 [...] Ven]us was [...] above [...]

No. 39

Obv.

- 1 [Year 73,] around the 21st', Jupiter's [last appearance in]
- 2 [...] (ideal) first appearance on the 22nd. Month IX, around until the 24th, [when] Jupiter [became stationary] to the east [...]
- 3 [...] the 2]5th', Jupiter's acronychal rising.
- 4 [Year 6]1, king Antiochus. Month III, night of the 9th, first part of the night, Jupiter was [...] above q [Leonis]
- 5 [Night of the xth, last part of the night,] Jupiter was 2 fingers above β Virginis, it came near. Month IX, night of the 15th, last part of the night, Jupiter was [...] below γ Virginis [...]
- 6 [last] part of the night, Jupiter, while moving back to the west, was 14 fingers below γ Virginis.

- 28 16 'na'-su' x x' [x x] 'x x x x x x' [...]
 29 x ½ KÜŠ ár RÍN šá [ULÜ UŠ] 'x x x x x x' [...]
-
- 30 [MU]-1-šu-5-KAM 'An [LUGAL] 'BAR 26 x x x x x' [... AN ana NIM ki UŠ-ú nn
 mm]
 31 [ina] IGI GIŠ.KUN A 2 'KÜŠ' [ana] ULÜ SIG [UŠ] 'x x x' [...]
-
- 32 [MU]-1-37-KAM 'An 'LUGAL' GU₄ 'GE₆' [x] 'ina ZÁLAG' AN 'e x' [...]
 33 'x x x AN e šur GIGIR šá' [ULÜ]
 34-35 (broken)

Lower edge

- 1 [...] 'x' ½ KÜŠ DU₆ GE₆ 'x x x' [...]
 2 [...] ina ZÁLAG AN ana 'NIM' ina' LAL-šú e 'MÚL x x' [...]
 3 [x'] 'x' USAN AN ana ŠÚ 'ina' [LAL]-'šú' [...]

Rev.

- I
 1 [MU]-1-me-25-KAM 'Se LUGAL
 2 DU₆ 14,10 ŠÚ na
 3 11 ME GE₆
 4 APIN 14 ŠÚ na
 5 14 ME GE₆
 6 GAN 16,10 ŠÚ na
 7 14,20 ME GE₆
 8 AB 15,30 ŠÚ na
 9 16 ME GE₆
 10 ZÍZ 11,50 ŠÚ na
 11 11 ME GE₆
 12 ŠE 9',10 ŠÚ na
 13 15 ME GE₆
 (2 lines blank)
 14 MU-1-me-26-KAM 'Se LUGAL
 15 GU₄ 28 AN-KU₁₀ šamáš 5 ÁB
 16 ki PAP NU IGI
 17 in 56 ME NIM-a
 18 SIG 13 AN-KU₁₀ sin šá DIB
 19 in 48 ME ana ŠÚ šamáš
 20 APIN GE₆ 29 AN-KU₁₀ šamáš
 21 šá DIB in 1,6' GE₆ ana ZÁLAG
 22 GAN 14 AN-KU₁₀ sin
 23 šá DIB in 26 ME NIM-a

- 28 rising of Saturn to sunrise: 16° [...] [...]
 29 [it became stationary] ½ cubit behind α Librae [...]
-
- 30 [Year] 65, [king] Antiochus. Month I, the 26th, [...] when Mars became stationary to
 the east,]
 31 [it became stationary] in front of θ Leonis, being 2 cubits low to the south [...]
-
- 32 [Year] 97, king Antiochus. Month II, night of the [xth,] last part of the night, Mars
 was [...] above [...]
 33, Mars was [...] above [ζ] Tauri [...]
 34-35 (broken)

Lower edge

- 1 [...] ½ cubit. Month VII', night [...]
 2 [...] last part of the night, Mars, while moving back to the east', was [...] above
 [...] [...]
 3 [...] first part of the night, Mars, while moving back to the west [...]

Rev.

- I
 1 [Year] 125, king Seleucus.
 2 Month VII, 'moonset to sunrise' plus 'sunrise to moonset': 14° 10'
 3 'moonrise to sunset' plus 'sunset to moonrise': 11°
 4 Month VIII 'moonset to sunrise' plus 'sunrise to moonset': 14°
 5 'moonrise to sunset' plus 'sunset to moonrise': 14°
 6 Month IX 'moonset to sunrise' plus 'sunrise to moonset': 16° 10'
 7 'moonrise to sunset' plus 'sunset to moonrise': 14° 20'
 8 Month X 'moonset to sunrise' plus 'sunrise to moonset': 15° 30'
 9 'moonrise to sunset' plus 'sunset to moonrise': 16°
 10 Month XI 'moonset to sunrise' plus 'sunrise to moonset': 11° 50'
 11 'moonrise to sunset' plus 'sunset to moonrise': 11°
 12 Month XII 'moonset to sunrise' plus 'sunrise to moonset': 9° 10'
 13 'moonrise to sunset' plus 'sunset to moonrise': 15°
 (2 lines blank)
 14 Year 126, king Seleucus.
 15 Month II, the 28th, solar eclipse (after) 5 months;
 16 when I watched I did not see it.
 17 At 56° after sunrise.
 18 Month III, the 13th, lunar eclipse which was omitted.
 19 At 48° before sunset.
 20 Month VIII, night of the 29th, solar eclipse
 21 which was omitted. At 66° before sunrise.
 22 Month IX, the 14th, lunar eclipse
 23 which was omitted. At 26° after sunrise.

II

- 1 MU-1-me-26-KAM [¹Se LUGAL]
 2 BAR 30 13,30 KUR₄ x
 3 DIR NU PAP
 4 13 14 ME DIR NU PAP
 5 13 6,20 ŠÚ DIR NU PAP
 6 14 1,30 GE₆ DIR *muš*
 7 14 4,20 *na* DIR *muš*
 8 27² 20,30 KUR DIR *muš*
 9 GU₄ 1 24 KUR₄ *a-pir muš*
 10 ¹*ana šamáš* SIG¹ *ina* GUB IGI
 11 12 9,40 ŠÚ DIR NU PAP
 12 13 5,30 ME *muš*
 13 13 30 NINDA *na* DIR NU PAP
 14 14 8¹,20 ¹GE₆ DIR¹ NU PAP
 15 27 12 KUR *muš*
 16 SIG 30 18 *na-su*
 17 KUR₄ *a-pir muš ina* GUB IGI
 18 13 12,50² ME DIR NU PAP
 19 13 3 ŠÚ *muš*
 20 14 1 GE₆ *muš*
 21 14 10 UŠ² *na muš*
 22 27 18,30¹ KUR *muš*
 23 ŠU 30 11 *na-su* SIG *a-kam* NU¹ PAP²
 24 *sin ina a-kam* IGI
 25 13 12¹ ŠÚ¹ DIR¹ NU PAP
 26 14 8,30 ME *a-kam m[uš¹]*
 27 14 2,40¹ *na muš*
 28 15 1,30 GE₆ *muš²*
 29 28 11,20 KUR *a-kam²*
 30 *ki* PAP NU IGI

III

- 1 I[ZI]
 2 13 [....]
 3 14 [....]
 4 14¹ [....]
 5 15² [x] ¹x¹ [....]
 6 27 10+[x]
 7 KIN 30 [....]
 8 14 2¹,20 ŠÚ *muš*
 9 15 6² ME *muš*

II

- 1 Year 126, [king Seleucus.]
 2 Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 30'; it was bright,
 3 clouds, I did not watch.
 4 The 13th, moonrise to sunset: 14°; clouds, I did not watch.
 5 The 13th, moonset to sunrise: 6° 20'; clouds, I did not watch.
 6 The 14th, sunset to moonrise: 1° 30'; measured (despite) clouds.
 7 The 14th, sunrise to moonset: 4° 20'; measured (despite) clouds.
 8 The 27th¹, moonrise to sunrise: 20° 30'; measured (despite) clouds.
 9 Month II, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 24°; it was bright, earthshine, measured;
 10 it was low to the sun; it could be seen while (the sun) stood there.
 11 The 12th, moonset to sunrise: 9° 40'; clouds, I did not watch.
 12 The 13th, moonrise to sunset: 5° 30'; measured.
 13 The 13th, sunrise to moonset: 30'; clouds, I did not watch.
 14 The 14th, sunset to moonrise: 8°² 20'; clouds, I did not watch.
 15 The 27th, moonrise to sunrise: 12°; measured.
 16 Month III, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 18°;
 17 it was bright, earthshine, measured; it could be seen while (the sun) stood there.
 18 The 13th, moonrise to sunset: 12° 50'; clouds, I did not watch.
 19 The 13th, moonset to sunrise: 3°; measured.
 20 The 14th, sunset to moonrise: 1°; measured.
 21 The 14th, sunrise to moonset: 10°; measured.
 22 The 27th, moonrise to sunrise: 18° 30'; measured.
 23 Month IV, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 11°; it was faint; there was mist, I did not watch¹;
 24 the moon became visible in mist.
 25 The 13th, moonset to sunrise: 12°²; clouds, I did not watch.
 26 The 14th, moonrise to sunset: 8° 30'; measured¹ (despite) mist.
 27 The 14th, sunrise to moonset: 2° 40'; measured.
 28 The 15th, sunset to moonrise: 1° 30'; measured².
 29 The 28th, moonrise to sunrise: 11° 20'; mist,
 30 when I watched I did not see it.

III

- 1 Mo[nth V,]
 2 The 13th, [....]
 3 The 14th, [....]
 4 The 14th¹, [....]
 5 The 15th¹, [....] [....]
 6 The 27th, [moonrise to sunrise:] 10+[x]
 7 Month VI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [....]
 8 The 14th, moonset to sunrise: 2°² 20'; measured.
 9 The 15th, moonrise to sunset: 6°²; measured.

10	15	12'	<i>na muš</i>
11	16 ¹	10,30	GE ₆ <i>muš</i>
12	27'	21'	KUR <i>muš</i>
13	DU ₆ 1	15',30	DIR' <i>muš</i>
14	13	9	ŠÚ <i>muš</i>
15	14	3'	<i>na muš</i>
16	15	1',30	ME <i>muš</i>
17	16	5'	GE ₆ <i>muš</i>
18	27	12'	KUR <i>muš</i>
19	APIN	30 'x x x'	
20		'x x x x'	
21	14	'x	ŠÚ' <i>muš</i>
22	15	6,30	ME <i>muš</i>
23	15	9'	<i>na muš</i>
24	16	'x'	GE ₆ <i>muš</i>
25	27	24',30	KUR
26			DIR NU PAP

IV

1'	15	3,40	ME [...]
2'	15	6'	<i>na</i> [...]
3'	16	11	GE ₆ [...]
4'	28	10', 'x'	[KUR ...]
5'	ZÍZ 1		[...]
6'	14	'9,20'	[ŠÚ ...]
7'	15'	2,20	ME
8'	15	5'	'x' [...]
9'	16'	10'	'x' [...]
10'	28'	'10,40'	KUR [...]
11'	ŠE 1	20,30	KUR ₄ [...]
12'	13	7'	ŠÚ [...]
13'	14	20	NINDA' ME [...]
14'	14	2,30	<i>na</i> [...]
15'	15'	'15'	GE ₆ [...]
16'	'20+x x x'		
17'	'x x x x'		

Colophon (across cols. II-IV)

- 1 U₄-1-KAM IGI-DUĜ-A^{meš} DIB-qa^{meš} u AN-K[U₁₀^{meš}]
 2 šá ana MU-1-me-44-KAM lA[n LUGAL kun-nu-u']

Comments

Obv. 14: According to computation, Venus was above α Leonis.

22: the first part of this line contained a first appearance in the west, expected on VIII 8.

10	The 15th.	sunrise to moonset: 12° ^{0'} ; measured.
11	The 16th.	sunset to moonrise: 10° 30'; measured.
12	The 27th?	moonrise to sunrise: 21° ^{0'} ; measured.
13	Month VII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	15° ^{0'} 30'; measured (despite) clouds?
14	The 13th.	moonset to sunrise: 9°; measured.
15	The 14th.	sunrise to moonset: 3° ^{0'} ; measured.
16	The 15th.	moonrise to sunset: 1° ^{0'} 30'; measured.
17	The 16th.	sunset to moonrise: 5° ^{0'} ; measured.
18	The 27th.	moonrise to sunrise: 12° ^{0'} ; measured.
19	Month VIII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:)	....
20	....
21	The 14th.	moonset to sunrise:; measured.
22	The 15th.	sunrise to moonset: 6° 30'; measured.
23	The 15th.	sunrise to moonset: 9° ^{0'} ; measured.
24	The 16th.	sunset to moonrise:; measured.
25	The 27th.	moonrise to sunrise: 24° ^{0'} 30';
26	clouds, I did not watch.	

IV

1'	The 15th,	moonrise to sunset: 3° 40' [...]
2'	The 15th,	sunrise to moonset: 6° ^{0'} [...]
3'	The 16th,	sunset to moonrise: 11° [...]
4'	The 28th,	[moonrise to sunrise:] 10° ^{0'} , [...]
5'	Month XI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	[...]
6'	The 14th,	[moonset to sunrise:] 9° 20' [...]
7'	The 15th?	moonrise to sunset: 2° 20' [...]
8'	The 15th,	[...] 5° ^{0'} [...]
9'	The 16th?	[...] 10° ^{0'} [...]
10'	The 28th?	moonrise to sunrise: 10° 40' [...]
11'	Month XII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	20° 30'; it was bright, [...]
12'	The 13th,	moonset to sunrise: 7° ^{0'} [...]
13'	The 14th,	moonrise to sunset: 20' [...]
14'	The 14th,	sunrise to moonset: 2° 30' [...]
15'	The 15th,	sunset to moonrise: 15° ^{0'} [...]
16'	The 20+xtth.	....
17'	....

Colophon

- 1 First days, appearances, passings, and eclipses
 2 which [were established] for year 144, [king] An[tiochus.]

No. 40

BM 34163 (= Sp 268)

Copy: LBAT 1257

Photo: Pl. 30

Goal year: SE 144

Obv. broken;

Rev.:

I

- 1 [...] ¹Se LUGAL
 2 [DU₆ x] ŠÚ na
 3 [x] ME GE₆
 4 [APIN x] ŠÚ na
 5 [x]+5 ME GE₆
 6 [GAN x]+2,10 ŠÚ na
 7 '24',20 ME GE₆
 8 [A]B 2',30 ŠÚ na
 9 17 ME GE₆
 10 ZIZ 9,50 ŠÚ na
 11 11,10 ME GE₆
 12 [Š]E 9 ŠÚ na
 13 [x]+6,30 ME GE₆
- 14 [M]U-1-me-[2]6-KAM ¹Se LUGAL
 15 'BAR' 28 [x] 'x x'
 16 'x x x x x x'

II

- 1 MU-1-me-26-KAM ¹Se LUGAL
 2 BAR 30 13,10 DIR NU PAP
 3 13 14 ME DIR NU PAP
 4 13 6,20 ŠÚ DIR NU PAP
 5 14 1,30 GE₆ DIR muš
 6 14 4,30 na DIR muš
 7 27 20,30 KUR DIR muš
 8 GU₄ 1 24 na KUR₄ a-pir ina GUB IGI
 9 12 9,50 ŠÚ DIR muš
 10 13 6,30 ME DIR m[uš]
 11 13 [x] NINDA na DIR NU PAP
 12 14 [x]+10 GE₆ muš
 13 27 '15' KUR m[uš]
 14 SIG 30 18 KUR₄ a-pir 'x x'
 15 13 2,50 M[E]
 16 13 3 Š[Ú]
 17 1[4] [...]

No. 40

Obv. broken;

Rev.:

I

- 1 [Year 125,] king Seleucus.
 2 [Month VII,] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 3 'moonrise to sunset' (plus) 'sunset to moonrise': [...]
 4 [Month VIII,] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 5 'moonrise to sunset' (plus) 'sunset to moonrise': [x]+5°
 6 [Month IX,] 'moonset to sunrise' (plus) 'sunrise to moonset': [x]+2° 10'
 7 'moonrise to sunset' (plus) 'sunset to moonrise': 24° 20'
 8 [Mon]th X, 'moonset to sunrise' (plus) 'sunrise to moonset': 2° 30'
 9 'moonrise to sunset' (plus) 'sunset to moonrise': 17°
 10 Month XI, 'moonset to sunrise' (plus) 'sunrise to moonset': 9° 50'
 11 'moonrise to sunset' (plus) 'sunset to moonrise': 11° 10'
 12 [Mon]th XII, 'moonset to sunrise' (plus) 'sunrise to moonset': 9°
 13 'moonrise to sunset' (plus) 'sunset to moonrise': [x]+6° 30'

14 [Year] 126, king Seleucus.

15 Month I, the 28th, [...]

16

II

- 1 Year 126, king Seleucus.
 2 Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 10'; clouds, I did not watch.
 3 The 13th, moonrise to sunset: 14°; clouds, I did not watch.
 4 The 13th, moonset to sunrise: 6° 20'; clouds, I did not watch.
 5 The 14th, sunset to moonrise: 1° 30'; measured (despite) clouds.
 6 The 14th, sunrise to moonset: 4° 30'; measured (despite) clouds.
 7 The 27th, moonrise to sunrise: 20° 30'; measured (despite) clouds.
 8 Month II, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 24°; it was bright, earthshine; it could be seen while (the sun) stood there.
 9 The 12th, moonset to sunrise: 9° 50'; measured (despite) clouds.
 10 The 13th, moonrise to sunset: 6° 30'; measured (despite) clouds.
 11 The 13th, sunrise to moonset: [x]'; clouds, I did not watch.
 12 The 14th, sunset to moonrise: [x]+10'; measured.
 13 The 27th, moonrise to sunrise: 15°; measured.
 14 Month III, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 18°; it was bright, earthshine,
 15 The 13th, moonrise to [sunset:] 2° 50' [...]
 16 The 13th, moonset to [sunrise:] 3° [...]
 17 The 1[4]th, [...]

III

- 1 IZI [...]
- 2 10+[x]
- 3 10+[x]
- 4 11+[x]
- 5 1'5' [...]
- 6 20+[x]
- 7 KIN [...]
- 8 11+[x]
- 9 12+[x]

No. 41

BM 45661 + 46170 (= 81-7-6, 55+631)

Copy: LBA 1259 (45661)

Photo: Pl. 31

Goal year: SE 149-151

Obv.:

- 1 [MU-1,30-KAM] ¹An LUGAL GU₄ in 22 GENNA ana ME 'E'-a 'IZI'
- 2 [x GENNA ana ŠÚ ki] UŠ-a 3 KÜŠ ár MÚL KUR šá KIR₄ šil PA UŠ NU PAP APIN
- 3 15 18 [n]a šá GENNA in 18 GENNA ina PA ŠÚ GAN 20 GENNA ina PA IGI
- 4 17 na-s[u] in 18 IGI
- 5 MU-1,31-KAM ¹An LUGAL BAR in EN 12 GENNA ana NIM ki UŠ-ú
- 6 1½ KÜŠ 'e' [x x] 'x x x šá PA UŠ' SIG in 11 GENNA ana M[E E]-a
- 7 IZI [in EN' x GENNA ana ŠÚ ki UŠ-a ina] IGI 4 TA.À[M? x^{meš}]
- 8 šá PA U[Š] 'x' [...]
- 9 4 KÜŠ 'ár' [...]
- 10 'MU' [...]

Rev.

- 1' GE₆ 24+[x]
- 2' GAN' 20+[x]
- 3' GE₆ 20+[x]
- 4' MU-1-[me-4-KAM] ¹An] u ¹[An] A-'šú' LUGAL^{me[š]} BAR 'GE₆' [x ina] ZÁLAG AN
- 5' SIG S[I MÁŠ nn] KÜŠ KIN GE₆ 29 USAN AN ana NIM ina LAL-šú S[IG]
- 6' [MÚL IGI šá SUH]UR MÁŠ ½ KÜŠ DU₆ GE₆ 3 USAN AN S[IG MÚL ár]

III

- 1 Month V, [...]
- 2 The 10+[xth,]
- 3 The 10+[xth,]
- 4 The 11+[xth,]
- 5 The 15th, [...]
- 6 The 20+[xth,]
- 7 Month VI, [...]
- 8 The 11+[xth,]
- 9 The 12+[xth,]

No. 41

Obv.:

- 1 [Year 90.] king Antiochus. Month II, around the 22nd, Saturn's acronychal rising. Month V.
- 2 [the xth, when Saturn] became stationary [to the west,] it became stationary 3 cubits behind θ Ophiuchi; I did not watch. Month VIII,
- 3 the 15th, sunset to setting of Saturn: 18°. Around the 18th, Saturn's last appearance in Sagittarius. Month IX, the 20th, Saturn's first appearance in Sagittarius;
- 4 rising of Saturn to sunrise: 17°; (ideal) first appearance on the 18th.
- 5 Year 91, king Antiochus. Month I, around until the 12th, when Saturn became stationary to the east.
- 6 it became stationary 1½ cubits above of Sagittarius. Month III, around the 11th, Saturn's acronychal rising.
- 7 Month V, [around until the xth, when Saturn became stationary to the west,] it became stationary [... in] front' of the four [...]
- 8 of Sagittarius [...] [...]
- 9 4 cubits behind [...]
- 10 Year [...]

Rev.

- 1' Night of the 24+[xth,]
- 2' Month IX', the 20+[xth,]
- 3' Night of the 20+[xth,]
- 4' Year 1[04,] kings [Antiochus] and his son [Antiochus.] Month I, night of [the xth,] last part of the night, Mars was
- 5' [nn] cubits below β [Capricorni.] Month VI, night of the 29th, first part of the night, Mars, while moving back to the east, was ½ cubit below
- 6' [γ Capri]corni. Month VII, night of the 3rd, first part of the night, Mars was ½ cubit below δ]

- 7' [ša SUḪUR] MÁŠ ½ KÙŠ AB GE₆ 17 USAN AN SIG MÚL K[UR šá DUR nu-nu
nn KÙŠ]
8' [GE₆ x USAN A]N SIG MÚL IGI šá SAG ḪUN 4 KÙŠ ZÍZ' [GE₆ x USAN AN]
9' [SIG MÚL ár šá SAG] ḪUN 5 KÙŠ ŠE GE₆ 10 USA[N A]N S[IG MÚL-MÚL nn
KÙŠ]

Upper edge

- 1 [GE₆ x USAN AN] e is le₁₀ 2½ KÙŠ DIR-ŠE G[E₆ x USAN AN SIG]
2 [šur GIGIR šá SI nn] KÙŠ GE₆ 20 USAN AN e šur GIGIR šá [ULÛ nn mm]

No. 42

BM 35587 (= Sp III 96)

Copy: LBAT 1346

Photo: Pl. 32

Goal year: SE 150³

Flake

I

- 1' [...] 'x'
2' [...] 'x' ME'
3' [...] i]š-ta-ḫat
4' [...] ina] TIL ZÁLAG-ru
5' [...] -ru
6' [...] M]E ana ŠÚ šámaš
7' [...] x]+5.40' ME DIR NU PAP
8' [...] ziq²-p]i² d²sin AN-KU₁₀
9' [...] ina 22 GE₆
10' [...] 'SI' TAG₄
11' [...] 'ana SI ZÁLAG-ir 37¹¹
12' [...] AN]-KU₁₀-šú SA₅
13' [...] 'x x¹meš
14' [...] 'x x x'
15' [...] 'x' ina ZÁLAG²-ru'
16' [...] 'x x x'
17' [...] 'x x x'

II

- 1' [...] ina IGI 'GENNA'
2' [ana Š]Ú GUB sin 1 KÙŠ
3' [x x x 13] 4.30 ŠÚ DIR muš
4' '14' 11' ME' 'x' 14 4.20 na muš

- 7' [Capri]corni. Month X. night of the 17th. first part of the night, Mars was [...] below
η [Piscium.]
8' [Night of the xth, first part of the night, Ma]rs was 4 cubits below β Arietis. Month
XI, [night of the xth, first part of the night, Mars was]
9' 5 cubits [below α Arie]tis. Month XII, night of the 10th, first part [of the night,
Ma]rs was [...] be[low η Tauri.]

Upper edge

- 1 [Night of the xth, first part of the night, Mars was] 2½ cubits above α Tauri. Month
XII₂, ni[ght of the xth, first part of the night, Mars was]
2 [nn] cubits [below β Tauri.] Night of the 20th, first part of the night, Mars was [...] above ζ Tauri.

No. 42

Flake

I

- 1' [...]
2' [...]
3' [...] it threw off (the shadow)
4' [... at] the end of clearing.
5' [...]
6' [...] before sunrise
7' [...] moonrise to sunset: [x]+5° 40'; clouds, I did not watch.
8' [...] When ... culminat[ed]², lunar eclipse;
9' [...] in 22° of night
10' [...] it left [...] fingers
11' [...] it cleared [...] to the north. 37°²
12' [...] Its eclipse was red.
13' [...]
14' [...]
15' [...], during clearing²
16'-17' [...]

II

- 1' [...] (the moon)] stood in front of Saturn
2' [to] the west, the moon being 1 cubit
3' [...] The 13th,] moonset to sunrise: 4° 30'; measured (despite) clouds.
4' The 14th, moonrise to sunset: 11°²; The 14th, sunrise to moonset: 4° 20'; measured.

- 5' 15 2,10 GE₆ 27 [x] KUR DIR [...]
 6' GU₄ 30 13 DIR *muš ana šamáš* SIG
 7' 14 1 ŠÚ DI[R ...]
 8' 15 10,20 ME DIR NU [PAP]
 9' 15 7 *na* DIR NU [PAP]
 10' 16 '10²¹ GE₆ DIR N[U PAP]
 11' 27 12 KUR DIR NU [PAP]
 12' SIG 1 20 KUR₄ 'a¹-pīr
 13' *ina* GUB IGI *ana šamáš* SIG 'x' [x x x]
 14' 5 KŪŠ 13 7 ŠÚ
 15' 14 2,20 *na m[uš]*
 16' 15 1,20 ME *m[uš]*
 17' 16 <x> GE₆ DIR 'muš'
 18' 26² 21 KUR *muš*
 19' ŠU 30 14 a¹-kam *muš* '14² 8²¹ [ŠÚ²]
 20' 15 7,30 ME *muš* 15² 5+x [...]
 21' 16² [x] 'x x' [...]

III

- 1' 15² [...]
 2' 15 2,30 [...]
 3' '16¹ 13 [...]
 4' 'x' [x] 'x' [...]
 5' 'x x x' [...]

Comments

The beginning of col. II provides the information that on I 1 the moon was to the west of Saturn. Since the sun is west of the moon too, Saturn cannot be very far in order to be visible. There are therefore not many occasions. I find only SE 132, 133 and 250. For the same year, there are badly damaged eclipse reports in col. I. One can at least see that there was a solar eclipse followed by a lunar one, both visible. This leaves SE 132 and 250. The lunar eclipse of SE 250 VII occurred late in the night; the moon set before its end. The lunar eclipse of SE 132 X would fit better. The solar eclipse of SE 132 V did occur for the most part after noon (line 6'). Unfortunately, the three preserved month lengths in col. II do not agree with the ones computed for SE 132 in PD. The date must be considered uncertain.

II 20^f: The traces of the 'Lunar Four' and their dates do not fit the pattern required; the readings remain at least partly uncertain.

- 5' The 15th, sunset to moonrise: 2° 10'. The 27th, moonrise to sunrise: [...]; clouds [...]
 6' Month II, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13°; measured (despite) clouds; it was low to the sun.
 7' The 14th, moonset to sunrise: 1°; clou[ds, ...]
 8' The 15th, moonrise to sunset: 10° 20'; clouds, I did not [watch.]
 9' The 15th, sunrise to moonset: 7°; clouds, I did not [watch.]
 10' The 16th, sunset to moonrise: 10°²; clouds, I did not [watch.]
 11' The 27th, moonrise to sunrise: 12°; clouds, I did not [watch.]
 12' Month III, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 20°; it was bright, earthshine;
 13' it could be seen while (the sun) stood there; it was low to the sun; [...]
 14' 5 cubits. The 13th, moonset to sunrise: 7°.
 15' The 14th, sunrise to moonset: 2° 20'; mea[sured.]
 16' The 15th, moonrise to sunset: 1° 20'; mea[sured.]
 17' The 16th, sunset to moonrise: <....>; measured (despite) clouds.
 18' The 26th², moonrise to sunrise: 21°; measured.
 19' Month IV, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 14°; measured (despite) mist. The 14th², [moonset to sunrise:] 8°² [...]
 20' The 15th, moonrise to sunset: 7° 30'; measured. The 15th², [...] 5+x° [...]
 21' The 16th², [...] [...]

III

- 1' The 15th², [...]
 2' The 15th, [...] 2° 30' [...]
 3' The 16th, [...] 13° [...]
 4' [...] [...]
 5' [...]

No. 43

BM 34498 (= Sp 622)

Copy: LBAT 1363

Photo: Pl. 32

Goal-year: SE 155

Flake

- 1' 'x' [...] 'x' [...]
-
- 2' MU-1,16-[KAM] ¹Se² 'x' [...]
- 3' SIG GE₆ 11 *ina* ZÁLAG AN SIG MÚ[L]
- 4' *ina* ZÁLAG AN SIG MÚL-MÚL 2 'x' [...]
- 5' *e is le*₁₀ 2 2/3 K[ÜŠ]
- 6' ŠE GE₆ 10 USA[N AN]
- 7' 'x x x' [...]

No. 44

BM 45651 (= 81-7-6,45)

Copy: LBAT 1260

Goal year: SE 155

'Obv.'

- 1' [...] 'x' [...]
- 2' [...] 'x' MÚL 'x' [...]
- 3' [...] 'e' MÚL *ár šá* ALLA *šá* ULÙ [...]
- 4' [...] 8 U ŠE GE₆ 11 USAN M[ÚL-BABBAR]
- 5' [...] MÚ[L 'IGI' *šá še-pít* MAŠ-MAŠ 1 1/2 KÜŠ GE₆ [...]
- 6' [...] 4 'KÜŠ' *dele-bat* 8 U *ana* NIM DIB GE₆ 10+[x]
- 7' [...] USAN *dele-bat e* MÚL *ár šá* ALLA *šá* [...]
- 8' [...] 'x x' 2' U *dele-bat* 2 U *ana* NIM DIB GE₆ 20 [...]
- 9' [...] x]+1 *dele-bat ina* ŠÚ *ina* A IGI 9 *na-su in* 1 IGI KIN [...]
- 10' [...] 'x' [...] *dele-bat* SIG MÚL TUR *šá* 4 KÜŠ] 'ár' LUGAL 1 KÜŠ 4 U GE₆ 27 *ina* ZÁLAG *dele-bat* SIG GIŠ.KUN A [...]
- 11' [...] 'x' [...] GE₆ 21 *ina* ZÁLAG *dele-bat* SIG DELE *šá* IGI ABSIN 2/3 KÜŠ *dele-bat* 2 [U]
- 12' [...] 'x' [...] 'GE₆ 23¹ *ina* ZÁLAG *dele-bat e* RÍN *šá* ULÙ 2/3 KÜŠ *dele-bat* 4 U *ana* ŠÚ LAL G[E₆]
- 13' [...] GE₆ 7 *ina* ZÁLAG *dele-bat e* MÚL *e šá* SAG GÍR-TAB 10 SI *dele-bat* 2 U *ana* ŠÚ LAL G[E₆]
- 14' [...] *dele-bat e* MÚL] 'KUR' *šá* KIR₄ *šil* PA 1 KÜŠ 8 U AB GE₆ 29 *ina* ZÁLAG *dele-bat* SIG SI MÁŠ 1 [KÜŠ]
- 15' [...] *dele-bat e* MÚL *ár šá* SUHUR MÁŠ 1 KÜŠ MU-1-me-48-KAM BAR 6 ŠÚ *šá* [*dele-bat*]

No. 43

Flake

- 1' [....] [....]
-
- 2' Year 76, Seleucus [....]
- 3' Month III, night of the 11th, last part of the night, Mars was [....] below [....]
- 4' last part of the night, Mars was 2 below η Tauri [....]
- 5' 2 2/3 cubits above α Tauri [....]
- 6' Month XII, night of the 10th, first part of the night, [Mars was]
- 7' [....]

No. 44

'Obv.'

- 1' [...] [....]
- 2' [...] star [....]
- 3' [...] above δ Cancrī [....]
- 4' [...] 8 fingers [....] Month XII, night of the 11th, first part of the night, Ju[piter was]
- 5' [...] 1 1/2 cubits [....] η Geminorum. Night [....]
- 6' [...] 4 cubits, Venus having passed 8 fingers to the east. Night of the 10+[xth,]
- 7' [...] first part of the night, Venus was [....] above γ/δ Cancrī [....]
- 8' [...] 2 fingers, Venus having passed 2 fingers to the east. Night of the 20th, [....]
- 9' [...] The x]+1st, Venus' first appearance in the west in Leo; sunset to setting of Venus: 9°; (ideal) first appearance on the 1st. Month VI, [....]
- 10' [...] [.... Venus was] 1 cubit 4 fingers [below q] Leonis. Night of the 27th, last part of the night, Venus was [....] below θ Leonis [....]
- 11' [...] [.... Night of] the 21st, last part of the night, Venus was 2/3 cubit below γ Virginis, Venus [....] 2 [fingers]
- 12' [...] [....] Night of the 23rd¹, last part of the night, Venus was 2/3 cubit above α Librae, Venus being 4 fingers back to the west. Ni[ght]
- 13' [...] Night of] the 7th, last part of the night, Venus was 10 fingers above β Scorpii, Venus being 2 fingers back to the west. Ni[ght]
- 14' [...] Venus was] 1 cubit 8 fingers [above] θ Ophiuchi. Month X, night of the 29th, 1 part of the night, Venus was 1 [cubit] below β Capricorni [....]
- 15' [...] Venus was 1 cubit above δ Capricorni. Year 148, month I, the 6th, last appear of [Venus]

- 16' [MU-1-me-9-KAM ¹An u ¹An A]-šú LUGAL^{meš} BAR 6 GU₄-UD ina ŠÚ ina MÚL-MÚL
3 KÙŠ ina IGI is l[e₁₀ IGI]
17' [...] ¹in x¹ [IGI' GE₆ x] USAN GU₄-UD e is l[e₁₀ 4 KÙŠ GE₆ 15' ¹USAN' [...]
18' [...] GU₄-UD e [šur GIGIR] šá ULÙ 1½ KÙŠ ¹GE₆ x¹ [...]
19' [...] ¹x x¹ [...] ¹x x¹ [...]

'Rev.'

I

- 1' [...] ¹x¹ [...]
2' [...] ¹x x¹
3' [...] ¹x¹ [...]
4' [...] ¹x x x¹
5' [...] ¹in' 21' x x x¹
6' [...] ¹x¹ 1,30 ME a-kam muš
7' [...] TA] a-kam ki-i E-a
8' [...] x GE₆
9' [...] in 38
10' [ME] ana ŠÚ šamāš

II

- 1' 13' ¹x¹ ŠÚ
2' 14' 2,30 GE₆[?]
3' 14' 11 ¹na¹
4' 20+[x x] 40 K[UR'] ¹x x¹
5' [ŠU'] 1 22 KUR₄ a-pir muš
6' ina GUB IGI ana šamāš NIM
7' 12 3,10 ŠÚ NU PAP
8' 13 2,30 ME a-kam muš
9' 13 20 NINDA na muš
10' 14 13,30 GE₆
11' 27 20 KUR

III

- 1' 10+[x]
2' 20+[x]
3' A[PIN']
4' 10+[x]
5' 10+[x]
6' 14 10+[x]
7' 15 5 GE₆
8' 7 15 KUR

Colophon

[...] DIB-qa^{meš} u AN-KU₁₀^{meš} šá ana MU-1-me-[55-KAM]

Comments

Obv. 10': Computation yields VI 24 for the passing of θ Leonis.

- 16' [Year 109,] kings [Antiochus and] his [son Antiochus.] Month I, the 6th, Mercury's [first appearance] in the west in Taurus, 3 cubits in front of α Tauri [...]
17' [...] (ideal) first appearance] on the xth. [Night of the xth,] first part of the night, Mercury was 4 cubits above α Tauri. Night of the 15th¹, first part of the night, [...]
18' [...] Mercury was 1½ cubits above ζ [Tauri.] Night of the xth, [...]
19' [...] [...]

'Rev.'

I

- 1' [...] [...]
2' [...]
3' [...] [...]
4' [...]
5' [...] at 21°
6' [...] moonrise to sunset: 1° 30'; measured (despite) mist.
7' [...] when it came out [from] the mist,
8' [...] night
9' [...] at 38°
10' [before] sunset.

II

- 1' The 13th, moonset to sunrise:
2' The 14th, sunset to moonrise: 2° 30'.
3' The 14th, sunrise to moonset: 11°.
4' The 20+[xth,] moonrise to sunrise: [x°] 40';
5' [Month IV¹,] the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 22°; it was bright, earthshine, measured;
6' it could be seen while (the sun) stood there; it was high to the sun.
7' The 12th, moonset to sunrise: 3° 10'; I did not watch.
8' The 13th, moonrise to sunset: 2° 30'; measured (despite) mist.
9' The 13th, sunrise to moonset: 20'; measured.
10' The 14th, sunset to moonrise: 13° 30'.
11' The 27th, moonrise to sunrise: 20°.

III

- 1' The 10+[xth,]
2' The 20+[xth,]
3' M[onth VIII¹,]
4' The 10+[xth,]
5' The 10+[xth,]
6' The 14th, [...] 10+[x°]
7' The 15th, sunset to moonrise: 5°.
8' The 27th, moonrise to sunrise: 15°.

Colophon

- 1 [...] passings, and eclipses which [were established] for year 1[55.]

No. 45

BM 34932 (= Sp II 451)

BM 40866 + 41130 (= 81-4-28,413+677)

BM 132286 (= 1958-4-12, 20)

The three pieces are parts of the same tablet but cannot be joined any more. There is no line missing between 34932 and 40866+ on the obverse, so a continuous line count is possible. 132286 is from the lower right part of the tablet.

34932: Upper edge, obv. 1-10, rev. I 1'-3', II 1'-5', III 1'-3', colophon;

40866+: Obv. 11-23, 27-38, rev. I 1-14, II 3-9;

132286: Obv. 25-38, rev. II 1-10, III 1-11, IV 1-6.

Copy: LBA 1262 (34932)

Photo: Pl. 32f.

Goal year: SE 158

Upper edge

1 *ina a-mat* ^dEN *u* ^dGAŠAN-*ia liš-lim*

Obv.:

- 1 MU-1,27-KAM ¹Se 'LUGAL SIG EN 10³ MÚL-BABBAR' [*ana ŠÚ ki UŠ-a*]
 2 DU₆ *in* 2 MÚL-BABBAR *ina* TIL RÍN ŠÚ A[PIN]
 3 ŠE *in* EN 8 MÚL-BABBAR *ana* NIM 'ki' [UŠ-*ú*]
-
- 4 MU-1,15-KAM ¹Se LUGAL KIN [....]
 5 APIN GE₆ 9 *ina* ZALÁG MÚL-BABBAR SIG 'MÚL' [*e šá SAG GÍR-TAB*]
-
- 6 MU-1-me-50-KAM ¹An LUGAL BAR [....]
 7 *šá* SI 2 KÜŠ *dele-bat* 4 U *ana* ŠÚ LAL [....]
 8 GE₆ 24 USAN *dele-bat e* MÚL IGI [*šá še-pit* MAŠ-MAŠ *e* MÚL *ár*]
 9 'šá še-pit MAŠ-MAŠ 1 KÜŠ¹ GE₆ 29 U[SAN]
 10 [x x] 'USAN' *dele-bat* SIG MAŠ-MAŠ *ár* [....]
 11 [SIG] GE₆ 4 USAN *dele-bat* SIG 'SAG' [A nn mm]
 12 *e* MÚL TUR *šá* 4 KÜŠ *ár* LUGAL 2/3 K[ÜŠ]
 13 'e' GÍR *ár* *šá* A 2 U *dele-bat* 2 U *ana* NI[M DIB]
 14 'e' SA₄ *šá* ABSIN 1 U *dele-bat* 2 U *ana* ŠÚ L[AL]
 15 SIG RÍN *šá* SI 4½ KÜŠ *ina* 20³ *dele-bat* <*ina*> ŠÚ [.... ŠÚ (....) DU₆ x *dele-bat* *ina* NIM]
 16 *ina* RÍN IGI TUR 8 *na-su in* 15 [IGI]
 17 SIG RÍN *šá* SI 2 KÜŠ 8 U GE₆ 15 [....]
 18 AB GE₆ 8 *ina* ZÁLAG *dele-bat e* MÚL [KUR *šá* KIR₄ *šil* PA]
 19 GE₆ 29 *ina* ZÁLAG *dele-bat e* MÚL IGI [*šá* SUHUR MÁŠ]
-
- 20 MU-1-me-12-KAM ¹An *u* ¹An' [A-šú LUGAL^{meš}]
 21 *ina* NIM UD-DA ŠÚ-šú DIB SIG 7 [....]
 22 GE₆ 28³ USAN GU₄-UD *e* 'x' [....]
 23 [x x] 'x' [x x] 'x' [....]
 (ca. 1 line broken)

No. 45

Upper edge

1 At the command of Bel and Beltija may it go well.

Obv.:

- 1 Year 87, king Seleucus. Month III, until² the 10th¹, [when] Jupiter [became stationary to the west,]
 2 Month VII, around the 2nd, Jupiter's last appearance in the end of Libra. Month V[III,]
 3 Month XII, around until the 8th, when Jupiter [became stationary] to the east, [....]
-
- 4 Year 75, king Seleucus. Month VI, [....]
 5 Month VIII, night of the 9th, last part of the night, Jupiter was [....] below [β Scorpīi]
-
- 6 Year 150, king Antiochus. Month I, [....]
 7 2 cubits [below] β [Tauri, Venus being 4 fingers back to the west [....]
 8 Night of the 24th, first part of the night, Venus was [....] above η [Geminorum]
 9 1 cubit¹ [.... μ] Geminorum. Night of the 29th, first [part of the night,]
 10 [....] first part of the night, Venus was [....] below β Geminorum. [....]
 11 [Month III,] night of the 4th, first part of the night, Venus was [....] below ε Leonis [....]
 12 2/3 cubit above ρ Leonis [....]
 13 2 fingers above β Virginis, Venus [having passed] 2 fingers to the east [....]
 14 1 finger above α Virginis, Venus being 2 fingers back to the west [....]
 15 4½ cubits below β Librae. Around¹ the 20th¹, Venus [last appearance in] the west [.... Month VII, the xth, Venus']
 16 first appearance [in the east] in Libra; it was small, rising of Venus to sunrise: 8°; (ideal) first appearance on the 15th. [....]
 17 2 cubits 8 fingers below β Librae. Night of the 15th¹, [....]
 18 Month X, night of the 8th, last part of the night, Venus was [....] above θ [Ophiuchi]
 19 Night of the 29th, last part of the night, Venus was [....] above γ Capricorni [....]
-
- 20 Year 112, [kings] Antiochus and [his son] Antiochus. [....]
 21 [Mercury's] last appearance in the east, omitted. Month III, the 7th, [....]
 22 Night of the 28th¹, first part of the night, Mercury was [....] above [....]
 23 [....] [....] [....]
 (ca. 1 line broken)

- 25 [...] 'x' [...]
 26 [...] 'x' IGI KUR NIM-a [...]
 27 'x' [...] 'x' KÜŠ AB in' [...]
 28 'x' [...] ina 'x' IGI ŠE in 8² G[U₄²-UD² ...]
-
- 29 MU-[1,39-KAM ...] GENNA ina zib^{me} IGI KUR NIM-a ina 8 [IGI ...]
 30 ŠU 'x' [...] D]UR^{ma} SIM-MAH UŠ KIN in 10+[x] GENNA ana ME [E-a ...]
 31 GAN 'x' [...] ana ŠÚ ki UŠ-a ina zib^{me} UŠ ŠE 15¹ 15 na GENNA in 17 GENNA ina [(TIL) zib^{me}] 'ŠÚ' [...]
-
- 32 MU-1,19¹-[KAM ...] 21² AN ina TIL ABSIN ŠÚ
-
- 33 MU-1-me-1[1-KAM ¹An u ¹An A-šú LUGAL^{meš} BAR GE₆ x U]SAN AN e MÚL IGI šá ALLA šá ULÙ ½ KÜŠ šá šu-ut KA LÚ'
 34 'x x' [...] GE₆ x USAN AN e MÚL ár šá AL]LA šá ULÙ 20 SI
 35 'x' [...] GE₆ x USAN AN] SIG SAG A 3½ KÜŠ GU₄ GE₆ 9 USAN AN e LUGAL ½ KÜŠ
 36 'x' [...] 'AN SIG MÚL TUR šá 4 KÜŠ¹ ár LUGAL ½ KÜŠ SIG GE₆ 7 USAN
 37 [AN SIG GIŠ.KUN A nn mm ... USAN AN x GÌR ár] šá A I U i-ša AN ana Š[Ú LAL'
]
 38 'ŠU¹ GE₆ 10+[x ...] KÜŠ?

Rev.

I

- 1 'MU-1-me-39¹-KAM
 2 ¹An u ¹An A-šú LUGAL^{meš}
 3 DU₆ 15 ŠÚ na
 4 9.50 ME GE₆
 5 APIN 13 ŠÚ na
 6 8.40 ME GE₆
 7 GAN 13 ŠÚ na
 8 9.10 ME GE₆
 9 'AB¹ 10 UŠ ŠÚ [na]
 10 '15¹ [ME GE₆]
 11 'ZÍZ 9 'ŠÚ na'
 12 14.40 ME G[E₆]
 13 ŠE 6.20 ŠÚ 'na'
 14 6' 'ME GE₆'
 (break)
 1' [...] i]n 48 GE₆ GIN
 2' [x x AN-K]U₁₀ sin šá DIB
 3' [in] 1,18 ME ana ŠÚ šamáš

- 25 [...] [...]
 26 [...] first appearance; it was bright (and) high, [...]
 27 [...] cubits [...] Month X, around' [...]
 28 [...] (ideal) first appearance on the xth. Month XII, around the 8th', Mer[cury]
-
- 29 Year [99, ...] Saturn's first appearance in Pisces; it was bright (and) high, [(ideal) first appearance] on the 8th [...]
 30 Month IV, [...] it became stationary [...] Piscium. Month VI, around the 10+[xth,] Saturn's acronychal [rising]
 31 Month IX, [...] when it became stationary to the west,] it became stationary [in Pis]ces. Month XII, the 15th', sunset to setting of Saturn: 15°. Around the 17th, Saturn's last appearance in [(the end of) Pisces.]
-
- 32 Year 79', [...] the 21st', Mars' last appearance in the end of Virgo.
-
- 33 Year 11[1, kings Antiochus and his son Antiochus. Month I, night of the xth,] first part of the night, Mars was ½ cubit above θ Cancri; according to oral information of a man.
 34 [...] Night of the xth, first part of the night, Mars was] 20 fingers [above δ] Cancri.
 35 [...] Night of the xth, first part of the night, Mars was] 3½ cubits below ε Leonis. Month II, night of the 9th, first part of the night, Mars was ½ cubit above α Leonis.
 36 [...] Mars was ½ cubit below ρ Leonis. Month III, night of the 7th, first part of the night,
 37 [Mars was below θ Leonis first part of the night, Mars was] 1 finger [...] β] Virginis. Mars being a little [back?] to [the west?]
 38 Month IV', night of the 10+[xth,] cubits'.

Rev.

I

- 1 Year 139.
 2 Kings Antiochus and his son Antiochus.
 3 Month VII, 'moonset to sunrise' (plus) 'sunrise to moonset': 15°
 4 'moonrise to sunset' (plus) 'sunset to moonrise': 9° 50'
 5 Month VIII, 'moonset to sunrise' (plus) 'sunrise to moonset': 13°
 6 'moonrise to sunset' (plus) 'sunset to moonrise': 8° 40'
 7 Month IX, 'moonset to sunrise' (plus) 'sunrise to moonset': 13°
 8 'moonrise to sunset' (plus) 'sunset to moonrise': 9° 10'
 9 Month X, 'moonset to sunrise' (plus) ['sunrise to moonset']: 10°
 10 ['moonrise to sunset' (plus) 'sunset to moonrise']: 15°
 11 Month XI, 'moonset to sunrise' (plus) 'sunrise to moonset': 9°
 12 'moonrise to sunset' (plus) 'sunset to moonrise': 14° 40'
 13 Month XII, 'moonset to sunrise' (plus) 'sunrise to moonset': 6° 20'
 14 'moonrise to sunset' (plus) 'sunset to moonrise': 6°
 (break)
 1' [...] At 48° after sunset.
 2' [...] lunar [eclip]se which was omitted.
 3' [At] 78° before sunset.

II

- 1 [MU-1-me-40-K]AM ¹An u ¹An
 2 A-šú LUGAL^{meš}
 3 BAR '30' [...] DIR *muš*
 4 [... *ana*¹] 'šámaš² NIM¹
 5 14 [x] ŠÚ DIR NU PAP
 6 15 [x] MJE¹ DIR NU PAP
 7 15 [x] *na* a-kam *muš*
 8 1[6] x GE₆ DI[R¹] *muš*
 9 '20'+[x x] KUR DI[R¹] NU PAP
 10 [...] 'x¹

(break)

- 1' [1]4 'x x¹ [ME]
 2' 14 4,20 ŠÚ
 3' 15 9 GE₆
 4' 15 11 *na muš*
 5' 27 17,20 KUR *muš*

III

- 1 IZI 30 12² 'KUR₄¹ [...]
 2 a-kam *muš*
 3 14 10 UŠ ME *muš*
 4 14 8 ŠÚ
 5 15 2 GE₆
 6 15 8 *na muš*
 7 28¹ 12² KUR a-kam *mu*[š]
 8 KIN 1 10 UŠ [...]
 9 ma-diš S[IG]
 10 13¹ [...]
 11 'x¹ [...]

(break)

- 1' 10+[x]
 2' 14 [...]
 3' 27 11, 10+[x]

IV

- 1 [GAN]
 2 [...]
 3 11 [...]
 4 12 [...]
 5 13 [...]
 6 14 [...]

II

- 1 [Year 140,] kings Antiochus and
 2 his son Antiochus.
 3 Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...] measured (despite) clouds.
 4' [...] high¹ [to] the sun¹.
 5' The 14th, moonset to sunrise: [...]; clouds, I did not watch.
 6' The 15th, moonrise to sunset: [...]; clouds, I did not watch.
 7' The 15th, [sunrise to moonset:]; measured (despite) mist.
 8' The 1[6]th, sunset to moonrise: [...]; measured (despite) [clou]ds.
 9' The 20+[xth, moonrise to sunrise: clou]ds?, I did not watch.
 10 [...] ...
 (break)
 1' [The 1]4th, [moonrise to sunset:] [...]
 2' The 14th, moonset to sunrise: 4° 20'.
 3' The 15th, sunset to moonrise: 9°.
 4' The 15th, sunrise to moonset: 11°; measured.
 5' The 27th, moonrise to sunrise: 17° 20'; measured.

III

- 1 Month V, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 12°²; it was bright², [...]
 2 measured (despite) mist.
 3 The 14th, moonrise to sunset: 10°; measured.
 4 The 14th, moonset to sunrise: 8°.
 5 The 15th, sunset to moonrise: 2°.
 6 The 15th, sunrise to moonset: 8°; measured.
 7 The 28th, moonrise to sunrise: 12°¹; measured (despite) mist.
 8 Month VI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 10° [...]
 9 it was very faint.
 10 The 13th¹, [...]
 11 [...]

(break)

- 1' The 10+[xth,]
 2' The 14th, [...]
 3' The 27th, [moonrise to sunrise:] 11° 10+[x']

IV

- 1 [Month IX,]
 2 [...]
 3 The 11th, [...]
 4 The 12th, [...]
 5 The 13th, [...]
 6 The 14th, [...]

Colophon

- 1 U₄-1-KAM IGI^{meš} DIB-qa^{meš} u AN-KU₁₀^{meš} šá ana M[U-1-me-58-KAM]
 2 ¹De-met-ri L[UGAL kun-nu-u]

Comments

Obv. 1: a stationary point in the west is expected around the beginning of month III.

30: Saturn's western station occurred between the longitudes of δ and ϵ Piscium. The Normal star η Piscium was more than 11° to the east.

38: the first sign looks more like KU.

No. 46

BM 34603 (Sp II 79 + 81-6-25,89)

Copy: LBA 1263

Photo: Pl. 34

Bibliography: L. Brack-Bernsen, SEAC 5th (1999) 22

Goal year: SE 160

Upper edge

- 1 ina a-mat^dEN u^dGASAN-ia liš-[li]m

Obv.

- 1 MU-1,29-KAM ¹Se LUG[AL] GU₄ in 26 MÚL-BABBAR ana ME E-a ŠU 'EN' 20'+[x]
 'MÚL-BABBAR ana ŠU' k[i UŠ-a]
 2 ár 4-ÀM IGI^{meš} šá PA 'šá ana' ZA maš-lu UŠ GAN 7 MÚL-BABBAR ina MÁŠ ŠU NU
 PAP AB 7 MÚL-BABBAR ina [...]
 3 3½ KÜŠ SIG dele-bat ½ KÜŠ ana ŠU LAL IGI 12 na-su
 4 MU-1,17-KAM ¹Se LUGAL DIB-qa^{meš} šá MÚL-BABBAR ina PA u MÁŠ ia-a-nu ŠE DIR
 5 MU-1-me-52-KAM ¹De-met-ri LUGAL GU₄ 1 8,20 na dele-bat in 3 dele-bat ina ŠU ina TIL
 MÚL-MÚL ŠU '15' [dele-bat ina NIM]
 6 ina MÚL-MÚL IGI KUR 9,30 na-su in 13 IGI SIG GE₆ 16 ina ZÁLAG dele-bat SIG šur
 GIGIR šá SI 2+'x' [KÜŠ]
 7 GE₆ 22 ina ZÁLAG dele-bat SIG šur GIGIR šá ULÙ 20 SI ŠU GE₆ 5 ina ZÁLAG dele-bat
 SIG MÚL IGI šá še-pit MAŠ-MAŠ 1 KÜŠ[Š] 4 U'
 8 GE₆ 8 ina ZÁLAG dele-bat SIG MÚL ár šá [š]e-pit MAŠ-MAŠ 1 KÜŠ 4 U dele-bat 2 U ana
 NIM DIB GE₆ 12 ina ZÁLAG dele-bat e MAŠ-MAŠ šá SIPA 1½ K[ÜŠ]
 9 GE₆ 23' ina ZÁLAG dele-bat SIG MAŠ-MAŠ IGI 5' KÜŠ GE₆ 28 ina ZÁLAG dele-bat SIG
 MAŠ-MAŠ ár 4 KÜŠ IZI GE₆ 12 ina ZÁLAG dele-bat
 10 'SIG' MÚL ár šá ALLA šá ULÙ ½ KÜŠ GE₆ 23 ina ZÁLAG dele-bat SIG SAG A 5 KÜŠ
 KIN GE₆ 2 ina ZÁLAG dele-bat SIG LUGAL 2 U
 11 dele-bat 2 U ana NIM DIB GE₆ 8 ina ZÁLAG dele-bat SIG MÚL TUR šá 4 KÜŠ ár LUGAL
 1 U dele-bat 3 U ana NIM DIB GE₆ 15 ina ZÁLAG dele-bat

Colophon

- 1 First days, appearances, passings, and eclipses which [were established] for year [158.]
 2 king Demetrius.

No. 46

Upper edge

- 1 At the command of Bel and Beltija may it go well.

Obv.

- 1 Year 89, king Seleucus. Month II, around the 26th, Jupiter's acronychal rising. Month
 IV, until' the 20+[xth,] when Jupiter [became stationary] to the west,
 2 it became stationary [...] behind the four front stars of Sagittarius which are similar to
 (the sign) ZA. Month IX, the 7th, Jupiter's last appearance in Capricorn; I did not watch.
 Month X, the 7th, Jupiter's first appearance in [...]
 3 3½ cubits below Venus, (Jupiter) being ½ cubit back to the west; rising of Jupiter to
 sunrise: 12° .
 4 Year 77, king Seleucus. The passings of Jupiter in Sagittarius and Capricorn are missing.
 Month XII was intercalary.
 5 Year 152, king Demetrius. Month II, the 1st, sunset to setting of Venus: $8^\circ 20'$. Around
 the 3rd, Venus' last appearance in the west in the end of Taurus. The 15th¹, [Venus'] first
 appearance [in the east]
 6 in Taurus; it was bright, rising of Venus to sunrise: $9^\circ 30'$; (ideal) first appearance on the
 13th. Month III, night of the 16th, last part of the night, Venus was 2+x [cubits] below
 β Tauri.
 7 Night of the 22nd, last part of the night, Venus was 20 fingers below ζ Tauri. Month IV,
 night of the 5th, last part of the night, Venus was 1 cubit 4 fingers below η Geminorum.
 8 Night of the 8th, last part of the night, Venus was 1 cubit 4 fingers below μ Geminorum,
 Venus having passed 2 fingers to the east. Night of the 12th, last part of the night, Venus
 was 1½ cubits above γ Geminorum.
 9 Night of the 23rd¹, last part of the night, Venus was 5' cubits below α Geminorum. Night
 of the 28th, last part of the night, Venus was 4 cubits below β Geminorum. Month V,
 night of the 12th, last part of the night, Venus
 10 was ½ cubit below δ Cancri. Night of the 23rd, last part of the night, Venus was 5 cubits
 below ϵ Leonis. Month VI, night of the 2nd, last part of the night, Venus was 2 fingers
 below α Leonis,
 11 Venus having passed 2 fingers to the east. Night of the 8th, last part of the night, Venus
 was 1 finger below ϱ Leonis, Venus having passed 3 fingers to the east. Night of the 15th,
 last part of the night, Venus

- 12 SIG GIŠ.KUN A 5 KÙŠ GE₆ 25 *ina* ZÁLAG *dele-bat e* GÌR *ár šá* A 4 U *dele-bat* 4 U *ana* ŠÚ LAL DU₆ GE₆ 7 *ina* ZÁLAG [*dele-bat*]
- 13 SIG DELE šá IGI ABSIN 2/3 KÙŠ GE₆ 18 *ina* ZÁLAG *dele-bat e* SA₄ šá ABSIN 1½ KÙŠ APIN GE₆ 5 *ina* ZÁLAG [*dele-bat*]
- 14 *e* RÍN šá ULÙ ½ KÙŠ GE₆ 9¹ *ina* ZÁLAG *dele-bat* SIG RÍN šá SI 2½ KÙŠ GE₆ 19 *ina* ZÁLAG *dele-bat e* [MÚL *e*]
- 15 šá SAG GÌR-TAB 4 U *dele-bat* 4 U *ana* [ŠÚ] LAL GE₆ 25 *ina* ZÁLAG *dele-bat e* SI₄ 2 KÙŠ 20 SI GAN GE₆ 4¹ [*ina* ZÁLAG *dele-bat*]
- 16 *e* MUL KUR šá KIR₄ šil PA 1 KÙŠ AB 20+[x] 8 *na* *dele-bat in* 26 *dele-bat in* NIM *ina* SAG GU ŠÚ MU-1-me-¹53¹-[KAM]
- 17 MU-1,54-KAM ¹An u ¹An A-[šú L]UGAL^{meš} BAR 28 GU₄-UD *ina* 'ŠÚ x¹ [.... IGI]
- 18 'GE₆ x USAN¹ GU₄-UD SIG MAŠ-MAŠ IGI 4 KÙŠ GE₆ 15 U[SAN] GU₄-UD 'SIG¹ [....]
- 19 ŠU 10 GU₄-UD *ina* NIM *ina* ALLA IGI KUR NIM-a 18 [.... GU₄-UD]
- 20 *ina* ŠÚ UD-DA ŠÚ-šú DIB 'DU₆ 26¹ [....]
- 21 'ár¹ GENNA *ana* NIM IGI KUR 15¹ [*na-su*]
- 22 [x G]E₆ 19¹ *ina* ZÁLAG GU₄-UD SIG 'MÚL x¹ [....]
- 23 [GE₆ x *ina*] ZÁLAG 'GU₄-UD¹ [....]

Rev.

I

1' [ŠE x ŠÚ] 'na¹

2' 11,30 ME GE₆

(blank)

3' MU-1-me-42-KAM ¹An u ¹An A-šú LUGAL^{meš}

4' ŠU 28 šamáš AN-KU₁₀ Á SI

5' u MAR *ki-i* TAB-ú *ina* 12 ME

6' šal-šú HAB-rat GAR-an

7' *in* 20 ME *ana* ŠÚ šamáš

8' IZI GE₆ 15 AN-KU₁₀ *sin*

9' 2 me¹ *ki* PAP NU IGI

10' *in* 4 UŠ GE₆ *ana* ZÁLAG

11' AB 13 AN-KU₁₀ *sin* 5 ÁB

12' BAR DIB *in* 7 UŠ ME NIM-a

13' GE₆ 29 AN-KU₁₀ šamáš šá DIB

14' *in* 1,33 GE₆ GIN

II

1' 15 [....]

2' 15 [....]

3' 28 [....]

4' SIG [....]

5' 11+[x *si*]n NU IGI

- 12 was 5 cubits below θ Leonis. Night of the 25th, last part of the night, Venus was 4 fingers above β Virginis, Venus being 4 fingers back to the west. Month VII, night of the 7th, last part of the night, [Venus]
- 13 was 2/3 cubit below γ Virginis. Night of the 18th, last part of the night, Venus was 1½ cubits above α Virginis. Month VIII, night of the 5th, last part of the night, [Venus]
- 14 was ½ cubit above α Librae. Night of the 9th, last part of the night, Venus was 2½ cubits below β Librae. Night of the 19th, last part of the night, Venus was
- 15 4 fingers above [β] Scorpii, Venus being 4 fingers back to the west. Night of the 25th, last part of the night, Venus was 2 cubits 20 fingers above α Scorpii. Month IX, night of the 4th, [last part of the night, Venus]
- 16 was 1 cubit above θ Ophiuchi. Month X, the 20+[xth], rising of Venus to sunrise: 8°. Around the 26th, Venus' last appearance in the east in the beginning of Aquarius. Year 153, [....]
- 17 Year 114, kings Antiochus and his son Antiochus. Month I, the 28th, Mercury's [first appearance] in the west [....]
- 18 Night¹ [of the xth,] first part of the night, Mercury was 4 cubits below α Geminorum. Night of the 15th, first part of the night, Mercury was [....] below [β Geminorum]
- 19 Month IV, the 10th, Mercury's first appearance in the east in Cancer; it was bright (and) high, rising of Mercury to sunrise: 18° [....]
- 20 [Mercury's] last appearance in the west, omitted. Month VII, the 26th¹, [....]
- 21 first appearance [.... behind] Saturn to the east; it was bright, 15° [....]
- 22 Night¹ of the 19th¹, last part of the night, Mercury was [....] below[....]
- 23 [Night of the xth,] last part of the night, Mercury [....]

Rev.

I

1' [Month XII, 'moonset to sunrise' (plus)] 'sunrise to moonset': [....]

2' 'moonrise to sunset' (plus) 'sunset to moonrise': 11° 30'.

(blank)

3' Year 142, kings Antiochus and his son Antiochus.

4' Month IV, the 28th, solar eclipse: when it began on the north

5' and west side, in 12° of daytime

6' it made one-third of the disk.

7' At 20° before sunset.

8' Month V, night of the 15th, lunar eclipse:

9': when I watched I did not see it.

10' At 4° before sunrise.

11' Month X, the 13th, lunar eclipse (after) 5 months,

12' BAR. omitted. At 7° after sunrise.

13' Night of the 29th, solar eclipse which was omitted.

14' At 93° after sunset.

II

1' The 15th, [....]

2' The 15th, [....]

3' The 28th, [....]

4' Month III, [....]

5' 11+[x°] I did not see the moon.

6'	15	[x]+30'	ME <i>muš</i>
7'	15	1	ŠÚ <i>muš</i>
8'	16	6'	GE ₆
9'	16	11'	na <i>muš</i>
10'	28	15	KUR <i>muš</i>
11'	ŠU '1'	17 KUR ₄	<i>a-pir muš ina GUB IGI</i>
12'	14	7	ŠÚ
13'	15	30 NINDA	ME <i>muš</i>
14'	15	7,30	na <i>muš</i>
15'	16	10 UŠ	GE ₆
16'	27	20,30	KUR <i>muš</i>

III

1'	1[4]	
2'	15	1 M[E x]
3'	16	8 GE ₆
4'	27	15 KUR <i>muš</i>
5'	APIN 1	12 <i>muš ana šamáš SIG</i>
6'	13	3 ŠÚ DIR <i>muš</i>
7'	14	5,30 ME DIR <i>muš</i>
8'	14	14 na <i>muš</i>
9'	15	6 GE ₆ <i>muš</i>
10'	27	13,50 KUR
11'		DIR NU PAP

IV

1'	'27'	15+[x] K[UR]
2'	ŠE 30	18 'x' [....]
3'	13	11,50 ME 'DIR' [x]
4'	13	4,10 ŠÚ D[IR] NU PAP
5'	14	1,40 G[E ₆]
6'	14	3,50 n[a N]U PAP
7'	28	10 UŠK[UR]
8'	DIR-ŠE 1	25' [....]
9'	DIR <i>muš ina GUB</i>	[IGI]

Colophon

1	U ₄ -1-KAM IGI ^{meš} DIB-qa ^{meš} u AN-KU ₁₀ ^{meš} šá ana MU-1-me-1-šu-KAM ¹ De-met-ri
	LUGAL]
2	kun-nu-[u]

Comments

Obv. 2: 'front' stars is an error for 'rear', see N. A. Roughton and G. L. Canzoneri, JHA 23 (1992) 195.

Rev. I 3': the second part of this line is squeezed in below its first part.

I 4'-7': solar eclipse of -169 July 28.

I 8'-10': lunar eclipse of -169 Aug 13.

I 11'f.: lunar eclipse of -168 Jan 7.

I 13'f.: solar eclipse of -168 Jan 22.

6'	The 15th,	moonset to sunrise: [...]+30'; measured.
7'	The 15th,	moonset to sunrise: 1°; measured.
8'	The 16th,	moonrise to sunset: 6°?
9'	The 16th,	sunrise to moonset: 11°?; measured.
10'	The 28th,	moonrise to sunrise: 15°; measured.
11'	Month IV, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	17°; it was bright, earthshine, measured; it could be seen while (the sun) stood there.
12'	The 14th,	moonset to sunrise: 7°.
13'	The 15th,	sunrise to moonset: 30'; measured.
14'	The 15th,	moonrise to sunset: 7° 30'; measured.
15'	The 16th,	sunset to moonrise: 10°.
16'	The 27th,	moonrise to sunrise: 20° 30'; measured.

III

1'	The 1[4th,]	
2'	The 15th,	moonrise to sunset: 1°.
3'	The 16th,	sunset to moonrise: 8°.
4'	The 27th,	moonrise to sunrise: 15°, measured.
5'	Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	12°, measured; it was low to the sun.
6'	The 13th,	moonset to sunrise: 3°; measured (despite) clouds.
7'	The 14th,	sunrise to moonset: 5° 30'; measured (despite) clouds.
8'	The 14th,	moonrise to sunset: 14°, measured.
9'	The 15th,	sunset to moonrise: 6°, measured.
10'	The 27th,	moonrise to sunrise: 13° 50';
11'		clouds, I did not watch.

IV

1'	The 27th,	moonrise [to sunrise:] 15+[x°]
2'	Month XII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:)	18° [....]
3'	The 13th,	sunrise to moonset: 11° 50'; clouds, [....]
4'	The 13th,	moonset to sunrise: 4° 10'; clouds, I did not watch.
5'	The 14th,	sunset to moonrise: 1° 40'; [....]
6'	The 14th,	moonrise to sunset: 3° 50'; [....] I did not watch.
7'	The 28th,	moonrise to sunrise: 10° [....]
8'	Month XII ₂ , the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	25°?, [....]
9'		measured (despite) clouds; [it could be seen] while (the sun) stood there.

Colophon

1	First days, appearances, passings, and eclipses which are established for year 160, king Demetrius.
---	---

No. 47

BM 34037 (= Sp 133)

Copy: LBA 1264

Photo: Pl. 33

Goal year: SE 167

Obv.:

- 1 MU-1,36-KAM ¹An LUGAL ŠU in 18 MÚL-BABBAR ina A ŠÚ NU PAP I[ZI]
 2 ana NIM ki-i UŠ-ú 2 KÙŠ ina IGI GÌR^{II} ár šá A UŠ ZÍZ in 16 [....]
-
- 3 MU-1,23-KAM ¹Se-lu-ku LUGAL DIR-ŠE GE₆ 15 USAN MÚL-BABBAR ana ŠÚ ina
 L[AL-šú]
 4 USAN MÚL-BABBAR ana NIM ina LAL-šú SIG SAG A 4 KÙŠ IZI GE₆ 22 [....]
 5 DU₆ GE₆ 26 ina ZÁLAG MÚL-BABBAR SIG GIŠ.KUN A 4 KÙŠ GAN GE₆ 25 ina
 Z[ALÁG]
-
- 6 MU-1-me-59-KAM ¹De-met-ri LUGAL BAR GE₆ 24 ina ZÁLAG dele-bat SIG M[ÚL]
 7 MÚL IGI šá SAG HUN [x KÙŠ] 'GE₆ 5' ina ZÁLAG dele-bat SIG 'MÚL ár šá' [....]
 8 SIG GE₆ '2' ina ZÁLAG¹ [x x x x] 'x x x' [....]
 9 'dele-bat ina NIM ina' [....]
 10 'x x' [....]
 11 'USAN dele-bat' [....]
 12 'x' [x] 'GE₆ 20'+[x]

Rev.

I

- 1' 'x' [....]
 2' '10+x' [....]
-
- 3' MU-1-me-48-[KAM]
 4' DIR-ŠE 'GE₆ 15' [....]
 5' 3 UŠ ár MÚL 'IGI¹' [....]
 6' ziq-pi^d sin 'AN-KU₁₀'
 7' Á ULÙ ki-i TAB-'ú'
 8' ina 10 UŠ GE₆ 3 SI GAR-an
 9' in 1.25 GE₆ ana ZÁLAG
 10' MU-1-me-49-KAM ¹An LUGAL
 11' IZI GE₆ 29 AN-KU₁₀ šamáš
 12' šá DIB in 1 DANNA
 13' GE₆ ana ZÁLAG KIN 13
 14' AN-KU₁₀ sin šá DIB in 48
 15' ME NIM-a ZÍZ 13 AN-KU₁₀ sin
 16' 5 ÁB BAR DIB in 31 ME
 17' ana ŠÚ šamáš 28 AN-KU₁₀ šamáš
 18' ki-i PAP NU IGI in 30 DANNA
 19' ME NIM-a

No. 47

Obv.:

- 1 Year 96. king Antiochus. Month IV, around the 18th, Jupiter's last appearance in Leo; I
 did not watch. Mon[th V,]
 2 when (Jupiter) became stationary to the east, it became stationary 2 cubits in front of β
 Virginis. Month XI, around the 16th, [....]
-
- 3 Year 83. king Seleucus. Month XII₂, night of the 15th, first part of the night, while
 Jupiter was moving back to the west, [....]
 4 first part of the night, Jupiter, while moving back to the east, was 4 cubits below ε Leonis.
 Month V, night of the 22nd, [....]
 5 Month VII, night of the 26th, last part of the night, Jupiter was 4 cubits below θ Leonis.
 Month IX, night of the 25th, last part of the night, [....]
-
- 6 Year 159. king Demetrius. Month I, night of the 24th, last part of the night, Venus was
 [....] below [....]
 7 [x cubits] β Arietis. Night of the 5th, last part of the night, Venus was [....] below α
 [Arietis]
 8 Month III, night of the 2nd¹, last part of the night, [....] [....]
 9 Venus' [last appearance] in the east in [....]
 10 [....]
 11 first part of the night, Venus was [....]
 12 [....] night of the 20+[xth,]

Rev.

I

- 1' [....]
 2' 10+x [....]
-
- 3' Year 148 [....]
 4' Month XII₂, night of the 15th, [....]
 5' when the point 3° behind [....]
 6' culminated. lunar eclipse:
 7' when it began on the south side,
 8' it made in 10° of night 3 fingers.
 9' At 85° before sunrise.
 10' Year 149. king Antiochus.
 11' Month V, night of the 29th, solar eclipse
 12' which was omitted. At 1 bēru
 13' before sunrise. Month VI, the 13th.
 14' lunar eclipse which was omitted. At 48°
 15' after sunrise. Month XI, the 13th, lunar eclipse
 16' (after) 5 months, BAR. omitted. At 31° before
 17' sunset. The 28th, solar eclipse:
 18' when I watched I did not see it. At half a bēru
 19' after sunrise.

- II
 1' 'x' [...]
 2' 'x' [...]
 3' 'x' [...]
 4' SIG [...]
 5' DIR *muš* 'ina GUB IGI'
 6' 13 10,10 ŠÚ NU PAP
 7' 14 15,20 ME [...]
 8' 14 3,20 na NU [PAP]
 9' 15 1,20 GE₆ NU PAP
 10' 27 8,30 KUR DIR NU PAP
 11' ŠU 1 19 na-su KUR₄ a-pir
 12' *muš* ina GUB [IGI]

Rev. I 3'-9': lunar eclipse of -162 March 30.

I 10'-13': solar eclipse of -162 Sep 8.

I 13'-15': lunar eclipse of -162 Sep 23.

I 15'-17': lunar eclipse of -161 Feb 18.

I 17'-19': solar eclipse of -161 March 5.

No. 48

BM 34044 (= Sp 140)

Copy: LBA 1265

Photo: Pl. 35

Bibliography: L. Brack-Bernsen, SEAC 5th (1999) 23

Goal year: SE 168

'Obv.

- 1' [...] GE₆ 26' US[AN]
 2' [...] 'GU₄-UD ina NIM' ina MAŠ-MAŠ IGI KUR NIM-a 19 na-su in 10 IGI
 3' [...] ina 'ZÁLAG' GU₄-UD SIG MAŠ-MAŠ á 4 KÙŠ 27 GU₄-UD ina NIM ina ALLA ŠÚ NU PAP
 4' [...] 'IGI' 16 13 na GU₄-UD [x 20'] + 6 GU₄-UD ina ŠÚ ina ABSIN ŠÚ KIN 'x GU₄-UD ina NIM ina ABSIN IGI 16,30 na-su
 5' [in' x IG]I' GE₆ 20+'x' ina ZÁLAG GU₄-UD e SA₄ šá ABSIN 1½ [KÙŠ DU₆] 23 11 na G[U₄-UD x x] GU₄-UD ina NIM ina RÍN ŠÚ
 6' [GAN x] GU₄-UD ina ŠÚ ina MÁŠ 1 KÙŠ á dele-bat ana NIM IGI KUR NI[M-a x x na-s]u 'in' [x IGI AB' x] ŠÚ šá GU₄-UD ina ŠÚ ina GU
 7' [TA x] šá GAN ki PAP NU IGI 15 GU₄-UD ina NIM ina MÁŠ [nn mm x SI] MÁŠ 2 KÙŠ ana ULÙ SIG e GENNA 1 KÙŠ [nn mm ana] ŠÚ LAL IGI
 8' [x x] 16' na-su in 11' IGI GE₆ 20 ina ZÁLAG GU₄-UD [x x x] 'KÙŠ' ZÍZ 14 17 na GU₄-UD in 17 GU₄-UD ina NIM ina GU ŠÚ M[U¹-1-m]e-23-KAM' 'x x'

- II
 1' [....]
 2' [....]
 3' [....]
 4' Month III [....]
 5' measured (despite) clouds; it could be seen while (the sun) stood there.
 6' The 13th, moonset to sunrise: 10° 10'; I did not watch.
 7' The 14th, sunrise to moonset: 15° 20'; [....]
 8' The 14th, moonrise to sunset: 3° 20'; I did not [watch.]
 9' The 15th, sunset to moonrise: 1° 20'; I did not watch.
 10' The 27th, moonrise to sunrise: 8° 30'; clouds, I did not watch.
 11' Month IV, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 19°; it was bright, earthshine,
 12' measured; [it could be seen] while (the sun) stood there.

No. 48

'Obv.

- 1' [...] night of the 26th, first [part of the night,]
 2' [...] Mercury's first appearance in the east in Gemini; it was bright (and) high, rising of Mercury to sunrise: 19°; (ideal) first appearance on the 10th.
 3' [...] last part of the night, Mercury was 4 cubits below β Geminorum. The 27th, Mercury's last appearance in the east in Cancer; I did not watch.
 4' [...] first appearance [....]. The 16th, sunset to setting of Mercury: 13°. [The 2]6th', Mercury's last appearance in the west in Virgo. Month VI, the xth, Mercury's first appearance in the east in Virgo; rising of Mercury to sunrise: 16° 30';
 5' [(ideal) first appear]ance' [on' the xth.] Night of the 20+[xth,] last part of the night, Mercury was 1½ [cubits] above α Virginis. [Month VII,] the 23rd, rising of Mercury to sunrise: 11°. [The xth,] Mercury's last appearance in the east in Libra.
 6' [Month IX, the xth,] Mercury's first appearance in the west in Capricorn, 1 cubit behind Venus to the east; it was bright (and) high, [rising of Mercury] to sunrise: [....]; (ideal) first appearance [on [the xth. Month X', the xth,] Mercury's last appearance in the west in Aquarius:
 7' [from the xth] of month IX, when I watched I did not see it. The 15th, Mercury's first appearance in the east in Capricorn, [.... β] Capricorni, being 2 cubits low to the south, 1 cubit above Saturn, being [....] back to the west.
 8' [...] rising of Mercury to sunrise: 16°; (ideal) first appearance on the 11th'. Night of the 20th, last part of the night, Mercury was [....] cubits. Month XI, the 14th, rising of Mercury to sunrise: 17°. Around the 17th, Mercury's last appearance in the east in Aquarius. Ye[ar 1]23,

- 9' [BAR x GU₄-UD *ina* ŠÚ] *ina* TIL HUN 1 ½ KÙ[Š x] MÚL-MÚL 1 KÙŠ *ina* IGI *sin ana* ŠÚ I[GI KUR' NI]M-a 17 *na-su in* 26 šá ŠE *ina* HUN' IGI
- 10' [MU-1,49-KA]M ¹An u ¹An [A-šú LU]GAL^{meš} SIG GE₆ 15 USAN GENNA *e* LUGAL 10 SI ŠU 1 13 *na* GENNA *in* '4' [...]
- 11' [...] 'ina' A 2 2/3 KÙ[Š ár] LUGAL *ana* NIM IGI 15,30 *na-su in* 11 IGI GE₆ 26 *ina* ZÁLAG GENNA *e* MÚL TUR 'šá' [4 KÙŠ á]r LUGAL 10 SI
- 12' [... x]+2 GENNA *ana* NIM *ki* UŠ-ú 1 ½ KÙŠ *ina* IGI GIŠ.KUN A 4 ½ KÙŠ *ana* ULÙ SIG UŠ ZÍZ *in* 6 GE[NNA *ana* ME] E-a
- 13' [MU-1,29-KAM ¹Se LUG]AL [SIG] 'in' EN 27 AN *ana* NIM *ki* UŠ-ú *ina* GU UŠ NU PAP IZI 1 AN *ana* ME E-a EN 27 AN *ana* ŠÚ *ki* UŠ-a *ina* GU UŠ NU PAP
- 14' [... GE₆] 25 *ina* ZÁLAG AN *e* MÚL IGI šá SUHUR MÁŠ 10 SI GE₆ 28 *ina* ZÁLAG AN *e* MÚL ár šá SUHUR MÁŠ 10 SI
- 15' [... SIG MÚ]L KUR šá DUR *nu-nu* 2 KÙŠ GE₆ 23 USAN AN SIG MÚL IGI šá SAG HUN 3 KÙŠ
- 16' [... MÚ]L ár šá SA[G HUN] '3' [KÙŠ] 'ŠE' GE₆ '2 USAN' AN SIG MÚL-'MÚL' x x' 'GE₆ x USAN AN'

Lower edge

- 1 [... DI]R-'ŠE' GE₆ 12 USAN' AN SIG šur GIGIR šá SI 1 ½ KÙ[Š]

Rev.:

I

- 1 [MU-1-me-49-KAM ¹An LUGAL
- 2 [DU₆ x ŠÚ] *na*
- 3 [x ME] GE₆
- 4 [APIN] 'x' ŠÚ *na*
- 5 [x]+10 ME GE₆
- 6 [GAN x]+5 ŠÚ *na*
- 7 [x] ME GE₆
- 8 [AB x]+50 ŠÚ *na*
- 9 [x]+40 ME GE₆
- 10 [ZÍZ x] ŠÚ *na*
- 11 [x ME] GE₆

II

- 1 MU-1-me-50-KAM ¹An LUGAL
- 2 BAR 30 13.30 DIR NU PAP
- 3 13 7.30 ŠÚ NU PAP

- 9' [Month I, the xth, Mercury's] first [appearance in the west] in the end of Aries, 1 ½ cubits [...]. η Tauri, 1 cubit in front of the moon to the west; [it was bright (and) high, sunset to setting of Mercury: 17°; (ideal) first appearance on the 26th of month XII in Aries.
- 10' [Year 109,] kings Antiochus and his son Antiochus. Month III, night of the 15th, first part of the night, Saturn was 10 fingers above α Leonis. Month IV, the 1st, sunset to setting of Saturn: 13°. Around the 4th, [...]
- 11' [... Saturn's] first appearance in Leo, 2 2/3 cubits [behind] α Leonis to the east; rising of Saturn to sunrise: 15° 30'; (ideal) first appearance on the 11th. Night of the 26th, last part of the night, Saturn was 10 fingers above ρ Leonis.
- 12' [..., the x]+2nd, when Saturn became stationary to the east, it became stationary 1 ½ cubits in front of θ Leonis, being 4 ½ cubits low to the south. Month XI, around the 6th, Sat[urn's acronychal] rising.
- 13' [Year 89,] king [Seleucus. Month III,] around until the 27th, when Mars became stationary to the east, it became stationary in Aquarius; I did not watch. Month V, the 1st, Mars' acronychal rising. Until the 27th, when Mars became stationary to the west, it became stationary in Aquarius; I did not watch.
- 14' [... Night] of the 25th, last part of the night, Mars was 10 fingers above γ Capricorni. Night of the 28th, last part of the night, Mars was 10 fingers above δ Capricorni.
- 15' [... 2 cubits [below] η Piscium. Night of the 23rd, first part of the night, Mars was 3 cubits below β Arietis.
- 16' [... 3 [cubits below] α Arietis. Month XII, night of the 2nd, first part of the night, Mars was below η Tauri'. Night of the xth, first part of the night, Mars was

Lower edge

- 1 [... Mo]nth XII₂, night of the 12th, first part of the night, Mars was 1 ½ cubits below β Tauri.

Rev.:

I

- 1 [Year 149,] king Antiochus.
- 2 [Month VII 'moonset to sunrise' (plus)] 'sunrise to moonset': [...]
- 3 ['moonrise to sunset' (plus)] 'sunset to moonrise': [...]
- 4 [Month VIII] 'moonset to sunrise' (plus) 'sunrise to moonset':
- 5 'moonrise to sunset' (plus) 'sunset to moonrise': [x]+10'
- 6 [Month IX] 'moonset to sunrise' (plus) 'sunrise to moonset': [x]+5°
- 7 'moonrise to sunset' (plus) 'sunset to moonrise': [...]
- 8 [Month X] 'moonset to sunrise' (plus) 'sunrise to moonset': [x]+50'
- 9 'moonrise to sunset' (plus) 'sunset to moonrise': [x]+40'
- 10 [Month XI] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
- 11 ['moonrise to sunset' (plus)] 'sunset to moonrise': [...]

II

- 1 Year 150, king Antiochus.
- 2 Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 30'; clouds, I did not watch.
- 3 The 13th, moonset to sunrise: 7° 30'; I did not watch.

- 4 14 1,20 *na* DIR NU PAP
 5 15 2,20 ME DIR NU PAP
 6 16 10 UŠ GE₆ 'DIR *muš*¹
 7 27 14,30 KUR DIR NU PAP
 8 GU₄ 1 23,40 DIR NU PAP
 9 13 4,20 ŠÚ DIR NU PAP
 10 14 15,10 ME DIR NU PAP
 11 14 5,10 *na* NU PAP
 12 [15] 'x' [GE₆ x] NU PAP

III

- 1 IZI 30 15 DIR 'muš¹
 2 14 5 ŠÚ
 3 15 2 ME NU PAP
 4 15 8 *na a-kam muš*
 5 16 9 GE₆ *muš*
 6 27 18,30 KUR *muš*
 7 KIN 1 15,30 KUR₄ *a-pir muš*
 8 13 12 ŠÚ
 9 14 4 ME *a-kam muš*
 10 14 4 *na a-kam muš*
 11 15 7,30 GE₆
 12 [2]7 16 KUR *a-kam muš*
 13 [DU₆ x x] 'x KUR₄ *a'-pir*

IV

- 1 GAN 1 17,30 KUR₄ *a-pir*
 2 *muš ina* GUB IGI *ana šamáš* NIM
 3 12 16,20 ŠÚ DIR NU PAP
 4 13 6,30 ME DIR N[U PAP]
 5 13 2,40 *na* DIR NU [PAP]
 6 14 6 GE₆ *a-kam m[uš]*
 7 27 19,30 KUR 'muš¹
 8 AB 1 23,10 DIR NU PAP
 9 12 9,20 ŠÚ DIR NU PAP
 10 13 2,30 ME DIR *muš*
 11 13 4,20 *na* DIR *muš*
 12 14 10,30 GE₆
 13 27 13 KUR
 14 ZÍZ 30 16,30 DIR *muš*
 15 [....] 'x'

Comments

Obv. 8': the broken observation on X 20 could refer to Saturn which is of the same longitude at this time: GU₄-UD [e GENNA nn] KÜŠ. - At the end of the line some signs seem to be erased. Therefore, the required month name und day number have to be restored in the beginning of line 9'.

16': Parallel in No. 50:23'.

- 4 The 14th, sunrise to moonset: 1° 20'; clouds, I did not watch.
 5 The 15th, moonrise to sunset: 2° 20'; clouds, I did not watch.
 6 The 16th, sunset to moonrise: 10°; measured (despite) clouds.
 7 The 27th, moonrise to sunrise: 14° 30'; clouds, I did not watch.
 8 Month II, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 23° 40'; clouds, I did not watch.
 9 The 13th, moonset to sunrise: 4° 20'; clouds, I did not watch.
 10 The 14th, moonrise to sunset: 15° 10'; clouds, I did not watch.
 11 The 14th, sunrise to moonset: 5° 10'; I did not watch.
 12 [The 15th, sunset to moonrise:]; I did not watch.

III

- 1 Month V, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 15°; measured (despite) clouds.
 2 The 14th, moonset to sunrise: 5°.
 3 The 15th, moonrise to sunset: 2°; I did not watch.
 4 The 15th, sunrise to moonset: 8°; measured (despite) mist.
 5 The 16th, sunset to moonrise: 9°; measured.
 6 The 27th, moonrise to sunrise: 18° 30'; measured.
 7 Month VI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 15° 30'; it was bright, earthshine, measured.
 8 The 13th, moonset to sunrise: 12°.
 9 The 14th, moonrise to sunset: 4°; measured (despite) mist.
 10 The 14th, sunrise to moonset: 4°; measured (despite) mist.
 11 The 15th, sunset to moonrise: 7° 30'.
 12 The [2]7th, moonrise to sunrise: 16°; measured (despite) mist.
 13 [Month VII,] it was bright, earthshine

IV

- 1 Month IX, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17° 30'; it was bright, earthshine,
 2 measured; it could be seen while (the sun) stood there; it was high to the sun.
 3 The 12th, moonset to sunrise: 16° 20'; clouds, I did not watch.
 4 The 13th, moonrise to sunset: 6° 30'; clouds, I did not [watch.]
 5 The 13th, sunrise to moonset: 2° 40'; clouds, I did not [watch.]
 6 The 14th, sunset to moonrise: 6°; measured (despite) mist.
 7 The 27th, moonrise to sunrise: 19° 30'; measured.
 8 Month X, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 23° 10'; clouds, I did not watch.
 9 The 12th, moonset to sunrise: 9° 20'; clouds, I did not watch.
 10 The 13th, moonrise to sunset: 2° 30'; measured (despite) clouds.
 11 The 13th, sunrise to moonset: 4° 20'; measured (despite) clouds.
 12 The 14th, sunset to moonrise: 10° 30'.
 13 The 27th, moonrise to sunrise: 13°.
 14 Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 16° 30'; measured (despite) clouds.
 15 [....]

No. 49

BM 34595 (= Sp II 69)

Copy: LBA 1267

Photo: Pl. 35

Goal year: SE 168

Obv.:

- 1 [...] 'x' IZI 30 MÚL-BABBAR *ina* ABSIN 2½ KÙŠ *ár* G[U₄-UD]
 2 [...] S]A₄ šá ABSIN 2½ KÙŠ *ana* SI NIM UŠ ZÍZ *in* 10+[x]
 3 [...] *ana* NI]M *ina* LAL-šú SIG GIŠ.KUN A 4½ KÙŠ DU₆ GE₆ 22 [...]
 4 [...] 29 *dele-bat* *ina* ŠÚ *ina* TIL MÚL-MÚL ŠÚ GU₄ 11 *dele-bat* *ina* ŠÚ (error for NIM) *ina* MÚL-[MÚL IGI]
 5 [...] SIG] šur GIGIR šá SI 3½ KÙŠ GE₆ 24 *ina* ZÁLAG *dele-bat* SIG š[ur GIGIR šá ULÙ]
 6 [...] GE₆] 9ⁱ *ina* ZÁLAG *dele-bat* SIG MÚL *ár* šá še-pít MAŠ-MAŠ 1 KÙŠ GE₆ 13 *ina* [ZÁLAG *dele-bat*]
 7 [...] ½ KÙŠ GE₆ 28 *ina* ZÁLAG *dele-bat* SIG MAŠ-MAŠ *ár* 3½ KÙŠ IZ[I]
 8 [...] 'SIG' SAG A 5 KÙŠ GE₆ 29 *ina* ZÁLAG *dele-bat* SIG LUGAL 2 U *dele-bat* 2 [U *ana* x x]
 9 [...] x]+1 *ina* ZÁLAG *dele-bat* SIG GIŠ.KUN A 5 KÙŠ GE₆ 22 *ina* ZÁLAG *dele-bat*
 10 [...] SIG DE]LE šá IGI ABSIN 2/3 KÙŠ *dele-bat* 4 SI *ana* ŠÚ LAL GE₆ 14 *ina* ZÁLAG *dele-bat*
 11 [...] e RÍN šá UL]Ù 8 SI GE₆ 6 *ina* ZÁLAG *dele-bat* SIG RÍN {šá RÍN} šá SI 2½ KÙŠ
 12 [...] 'e' SI₄ 2 2/3 KÙŠ GAN GE₆ 3 *ina* ZÁLAG *dele-bat* e MÚL KUR šá KIR₄ šil PA 1 KÙŠ
 13 [...] *ina*] 'ŠÚ *ina*] HUN IGI TUR 8 *na-su in* 28 IGI
 14 [...] G]U₄-UD *e is* le₁₀ 3½ KÙŠ GE₆ 11
 15 [...] e šur GIGIR] šá ULÙ 1½ KÙŠ GE₆ 21 USAN GU₄-UD
 16 [...] e MÚL *ár* šá še]-pít MAŠ-MAŠ 1½ KÙŠ GE₆ 27 USAN GU₄-UD
 17 [...] *ina* NIM *ina*] MAŠ-MAŠ IGI KUR NIM-^a 19¹¹ *na-su in* 10 IGI
 18 [...] 'x'

'Rev.

Cols. I and II broken:

III

- 1' [...] 'x'
 2' [...] DIR NU PAP

No. 49

Obv.:

- 1 [Year 97,] Month V, the 30th, Jupiter's [first appearance] in Virgo, 2½ cubits behind M[ercury]
 2' [...] it became stationary [...] α Virginis, being 2½ cubits high to the north. Month XI, around the 10+[xth,]
 3 [Year 85, Jupiter,] while moving back to the east, was 4½ cubits below θ Leonis. Month VII, night of the 22nd, [...]
 4 [Year 160,] the 29th, Venus' last appearance in the west in the end of Taurus. Month II, the 11th, Venus' [first appearance] in the east' in Tau[rus]
 5 [...] 3½ cubits [below] β Tauri. Night of the 24th, last part of the night, Venus was [...] below ζ [Tauri]
 6 [...] night] of the 9th, last part of the night, Venus was 1 cubit below μ Geminorum. Night of the 13th, last [part of the night, Venus was]
 7 [...] ½ cubit. Night of the 28th, last part of the night, Venus was 3½ cubits below β Geminorum. Month V, [...]
 8 [...] 5 cubits below ε Leonis. Night of the 29th, last part of the night, Venus was 2 fingers below α Leonis, Venus being 2 fingers [...]
 9 [...] Night of the x]+1st, last part of the night, Venus was 5 cubits below θ Leonis. Night of the 22nd, last part of the night, Venus was
 10 [...] 2/3 cubit [below] γ Virginis, Venus being 4 fingers back to the west. Night of the 14th, last part of the night, Venus was
 11 [...] Month VIII,] 8 fingers [above α Libr]ae. Night of the 6th, last part of the night, Venus was 2½ cubits below β Librae.
 12 [...] 2 2/3 cubits above α Scorpii. Month IX, night of the 3rd, last part of the night, Venus was 1 cubit above θ Ophiuchi.
 13 [...] first appearance in the west in Aries: it was small, sunset to setting of Venus: 8°: (ideal) first appearance on the 28th.
 14 [Year 122,] Mercury was 3½ cubits above α Tauri. Night of the 11th,
 15 [...] 1½ cubits [above ζ] Tauri. Night of the 21st, first part of the night, Mercury was
 16 [...] 1½ cubits [above μ] Geminorum. Night of the 27th, first part of the night, Mercury was
 17 [...] first appearance [in the east in] Gemini; it was bright (and) high, rising of Mercury to sunrise: 19°¹²; (ideal) first appearance on the 10th.
 18 [...]

'Rev.

I and II broken:

III

- 1' [...]
 2' [...] clouds, I did not watch.

- 3' [x x] GE₆ DIR NU PAP
 4' [x] 6,40 na NU PAP
 5' [x] 22,50 KUR DIR NU PAP

IV

- 1' [] [x']
 2' 'x' 10 UŠ^{na a-kam muš}
 3' [2]7 17,30 KUR DIR NU PAP
 4' ŠE 1 24¹, 10 DIR NU PAP
 5' 12 6,50 ŠÚ DIR NU PAP
 6' 13 8 ME DIR [x x]
 7' 13 5,50 na D[IR x x]
 8' 14 4 GE₆ DIR m[uš]
 9' 28² 8,50¹ KUR ki PAP NU IGI
 10' BAR 30 18¹ na-su DIR muš

Colophon

- 1 [... D]IB-qa^{meš} u AN-KU₁₀^{meš} šá a-na MU 1-me-1-šu-8-KAM
 2 ¹De-met-ri LUGAL kun-nu-u'

No. 50

BM 34615 (= Sp II 94 + 751)

Copy: LBA 1266

Photo: Pl. 36

Bibliography: L. Brack-Bernsen, SEAC 5th (1999) 23

Goal year: SE 168

Obv.

- 1' [... 'x x' [...]
 2' [... e S]A₄ šá ABSIN 1 '½' [KÙŠ [...]
 3' [... GE₆ 17¹ ina ZÁLAG dele-bat e MÚ[L² [...]
 4' [... 1]6 9 na dele-bat i[n [...]
 5' [MU-1-me]-22-KAM ¹An LUGAL BAR 2 GU₄-UD ina ŠÚ ina MÚL-'MÚL' I[GI [...]
 6' [USAN] GU₄-UD SIG šur GIGIR šá SI 1½ KÙŠ GE₆ 15 US[AN GU₄-UD e šur GIGIR šá ULÙ [...]
 7' [e MÚL] 'IGI' šá še-pit MAŠ-MAŠ 1½ KÙŠ GE₆ 23 USAN G[U₄-UD] e M[ÚL [...]
 8' [e MAŠ-MAŠ šá SIP]A 4 KÙŠ GU₄ 8 GU₄-UD ina ŠÚ ina MAŠ-M[AŠ Š]Ú NU PAP SIG 15 [...]
 9' [... G]U₄-UD SIG MAŠ-MAŠ IGI 5 KÙŠ G[E₆ x] ina ZÁLAG GU₄-UD SIG MAŠ-MAŠ á[r [...]
 10' [IZI x GU₄-UD ina] 'ŠÚ' ina ABSIN IGI NU PAP [x x x n]a GU₄-UD in 18 GU₄-UD ina ŠÚ in[a x ŠÚ [...]

- 3' [...] sunset to moonrise: [...]; clouds, I did not watch.
 4' [...] sunrise to moonset: 6° 40'; I did not watch.
 5' [...] moonrise to sunrise: 22° 50'; clouds, I did not watch.

IV

- 1' [...]
 2' The xth, sunrise to moonset: 10°; measured (despite) mist.
 3' The 27th, moonrise to sunrise: 17° 30'; clouds, I did not watch.
 4' Month XII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 24° 10'; clouds, I did not watch.
 5' The 12th, moonset to sunrise: 6° 50'; clouds, I did not watch.
 6' The 13th, moonrise to sunset: 8°; clouds [...]
 7' The 13th, sunrise to moonset: 5° 50'; cl[ouds,]
 8' The 14th, sunset to moonrise: 4°; measured (despite) clouds.
 9' The 28th¹, moonrise to sunrise: 8° 50'¹; when I watched I did not see it.
 10' Month I, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 18°; measured (despite) clouds.

Colophon

- 1 [...pa]ssings, and eclipses which were established for year 168.
 2 king Demetrius.

No. 50

Obv.

- 1' [...] [...]
 2' [...] 1½ [cubits above] α Virginis [...]
 3' [...] Night of the 17th¹, last part of the night, Venus was [...] above β/δ [Scorpii]
 4' [...] the 1]6th, rising of Venus to sunrise: 9°. Ar[ound]
 5' [Year 1]22, king Antiochus. Month I, the 2nd, Mercury's first appearance in the west in Taurus [...]
 6' [first part of the night,] Mercury was 1½ cubits below β Tauri. Night of the 15th, first part of the night, [Mercury was above ζ Tauri]
 7' 1½ cubits [above] η Geminorum. Night of the 23rd, first part of the night, Mercury was [...] above [...]
 8' 4 cubits [above γ Gemino]rum. Month II, the 8th, Mercury's last appearance in the west in Gemini; I did not watch. Month III, the 15th, [...]
 9' [...] Mercury was 5 cubits below α Geminorum. Night [of the xth,] last part of the night, Mercury was [...] below β Geminorum. [...]
 10' [Month V, the xth, Mercury's] first appearance in the west in Virgo; I did not watch [...] sunset to setting of Mercury: [...] Around the 18th, Mercury's [last appearance] in the west in [...]

- 11' [...] *ina* ZÁLAG [GU₄-UD *e*] SA₄ šá ABSIN 1½ KÜŠ DU₆ 23 11 *n*[a GU₄-UD]
 12' [...] *ár* *dele-bat ana* NIM IGI KUR NIM-*a* 15 *na-su in* 10 [IGI]
 13' [...] 'x x' GU₄-UD *ina* NIM *ina* MÁŠ 1 KÜŠ *ár* SI MÁŠ 'x' [...]
 14' [...] N]IM-*a* 16 *na-su in* 12 IGI GE₆ 20 *ina* ZÁLAG GU₄-UD 'e' [GENNA']
 15' [...] MU]-1-me-23-KAM BAR 1 GU₄-UD *ina* ŠÚ *ina* TIL HUN 1½' KÜŠ *ina* IGI MÚL-
 MÚL *ana* 'x x' [....]
 16' [MU-1-me-9-KAM ¹An *u* ¹An A]-šú LUGAL^{meš} SIG GE₆ 25 USAN GENNA *ana* NIM *ina*
 LAL-šú *e* LUGAL 2 SI ŠU 1 '13' [*na* GENNA]
 17' [...] GENN]A *ina* A 2 2/3 KÜŠ *ár* LUGAL *ana* NIM IGI 15,30 *na-su in* 11 IGI GE₆ 26 *ina*
 ZÁLAG GENN]A [...]
 18' [...] *ana* N]IM *ki* UŠ-ú 1½ KÜŠ *ina* IGI GIŠ.KUN A 4½ KÜŠ *ana* ULÙ SIG UŠ ZÍZ *in*
 6 GENNA *ana* [ME E-*a*]
 19' [MU-1,29-KAM S]IG *in* EN 27 AN *ana* NIM *ki* UŠ-ú *ina* GU UŠ NU PAP IZI *in* 1 AN
ana ME E-*a* NU PAP EN 27 [...]
 20' [...] 'UŠ' NU IGI
 21' [MU-1-me-21-KAM] GE₆ 24 *ina* ZÁLAG AN *e* MÚL IGI šá SUHUR MÁŠ 10 SI GE₆
 25 *ina* ZÁLAG AN *e* MÚL *ár* šá SUHUR [MÁŠ nn mm]
 22' [...] A]N SIG MÚL KUR šá DUR *nu-nu* 2 KÜŠ GE₆ 23 USAN AN SIG MÚL *ár* šá SAG
 HUN 3 KÜŠ G[E₆]
 23' [...] šá SAG HUN 4 KÜŠ ŠE GE₆ 2 USAN AN SIG MÚL-MÚL 1 KÜŠ 4 SI GE₆ 22'
 USAN AN *e* [*is* le₁₀ nn mm]
 24' [...] US]AN AN SIG šur GIGIR šá SI 1½ KÜŠ

Rev.:

I

- 1 [MU-1-me-49-KA]M ¹An LUGAL
 2 [DU₆ x Š]Ú *na*
 3 [x] ME GE₆
 4 [APIN x Š]Ú *na*
 5 [x]+20 ME GE₆
 6 [GAN x] ŠÚ *na*
 7 [x] ME GE₆

- 11' [...] first part of the night, [Mercury was] 1½ cubits [above] α Virginis. Month VII, the
 23rd, [rising of Mercury] to sunrise: 11° [...]
 12' [...] Mercury's first appearance [in the west.... behind] Venus to the east; it was bright
 (and) high, sunset to setting of Mercury: 15°; [(ideal) first appearance] on the 10th. [...]
 13' [...] ... Mercury's [first appearance] in the east in Capricorn, 1 cubit behind β Capricorni
 [...]
 14' [...] it was (bright and) high, rising of Mercury to sunrise: 16°; (ideal) first appearance on
 the 12th. Night of the 20th, last part of the night, Mercury was [...] above [Saturn]
 15' [...] Year] 123, month I, the 1st, Mercury's [first appearance] in the west in the end of
 Aries, 1½ cubits in front of η Tauri, to [...]
 16' [Year 109,] kings [Antiochus and] his [son Antiochus.] Month III, night of the 25th, first
 part of the night, Saturn, while moving back to the east, was 2 fingers above α Leonis.
 Month IV, the 1st, [sunset to setting of Saturn:] 13° [...]
 17' [...] Sat]urn's first appearance in Leo, 2 2/3 cubits behind α Leonis to the east; rising of
 Saturn to sunrise: 15° 30'; (ideal) first appearance on the 11th. Night of the 26th, last
 part of the night, Saturn was [...]
 18' [...] when [Saturn] became stationary to the east, it became stationary 1½ cubits in
 front of θ Leonis, being 4½ cubits low to the south. Month XI, around the 6th, Saturn's
 acronychal [rising.]
 19' [Year 89,] Month III, around until the 27th, when Mars became stationary to the
 east, it became stationary in Aquarius; I did not watch. Month V, around the 1st, Mars'
 acronychal rising; I did not watch. Until the 27th, [...]
 20' became stationary? [...] I did not see it.
 21' [Year 121,] Night of the 24th, last part of the night, Mars was 10 fingers above γ
 Capricorni. Night of the 25th, last part of the night, Mars was [...] above δ Capricorni
 [...]
 22' [...] Mars was 2 cubits below η Piscium. Night of the 23rd, first part of the night, Mars
 was 3 cubits below α Arietis. Ni[ght?]
 23' [...] 4 cubits [...] Arietis. Month XII, night of the 2nd, first part of the night, Mars was
 1 cubit 4 fingers below η Tauri. Night of the 22nd', first part of the night, Mars was [...] above
 [α Tauri]
 24' [...] first part of the night, Mars was 1½ cubits below β Tauri.

Rev.:

I

- 1 [Year 149.] king Antiochus.
 2 [Month VII,] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 3 'moonrise to sunset' (plus) 'sunset to moonrise': [...]
 4 [Month VIII,] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 5 'moonrise to sunset' (plus) 'sunset to moonrise': [x]+20'
 6 [Month IX,] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 7 'moonrise to sunset' (plus) 'sunset to moonrise': [...]

- 8 [AB x] ŠÚ *na*
 9 [x] ME GE₆
 10 [ZÍZ x ŠÚ *na*]
 11 [x ME GE₆]
 12 [ŠE x]+10Š[Ú *na*]
 13 [x]+40 ME GE₆
 14 [M]U-1-me-50-KAM ¹*An* LUGAL
 15 [IZ]I 14 5 ŠÚ *muš*
 16 [A]N-KU₁₀ *sin šá* DIB
 17 [*i*]n 25 ME *ana* ŠÚ *šamáš*
 18 GE₆ 29 AN-KU₁₀ *šamáš šá* DIB
 19 [*i*]n 16 GE₆ GIN
 20 ZÍZ 13 1 ŠÚ DIR *muš*
 21 [A]N-KU₁₀ *sin šá* DIB
 22 [*i*]n¹ 1¹, 10 ME NIM-*a*
 23 [GE₆] '29 x' [...]

II

- 1 MU-1-me-50-KAM ¹*An* LUGAL
 2 BAR 30 13,30 DIR NU PAP
 3 13 7,30 ŠÚ NU PAP
 4 14 1,20 *na* DIR NU PAP
 5 15 2,20 ME DIR NU PAP
 6 16 10 UŠ GE₆ DIR NU PAP
 7 27 14,30 KUR DIR NU P[AP]
 8 GU₄ 1 23,40 DIR NU PAP
 9 13 4,20 ŠÚ DIR NU PAP
 10 14 6,10 ME DIR NU PAP
 11 [14] 5,10 *na* NU PAP
 12 [15 x] NINDA GE₆ DIR NU PAP
 13 '26 x' KUR NU PAP
 14 SIG 30 17 *na-su* KUR₄ *a-pir*
 15 *mu[š] ana šamáš* SIG
 16 14 1,40 ŠÚ
 17 15 5 ME *a-kam muš*
 18 15 10 UŠ *na a-kam muš*
 19 16 8,10 GE₆ NU P[AP]
 20 27 17 KUR N[U PAP]
 21 ŠU 1 20+[x]

- 8 [Month X.] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 9 'moonrise to sunset' (plus) 'sunset to moonrise': [...]
 10 [Month XI, 'moonset to sunrise' (plus) 'sunrise to moonset':]
 11 ['moonrise to sunset' (plus) 'sunset to moonrise':]
 12 [Month XII.] 'moonset to [sunrise' (plus) 'sunrise to moonset': x]+10'
 13 'moonrise to sunset' (plus) 'sunset to moonrise': [x]+40'
 14 Year 150. king Antiochus.
 15 Month V. the 14th. moonset to sunrise: 5°, measured.
 16 Lunar eclipse which was omitted.
 17 At 25° before sunset.
 18 Night of the 29th, solar eclipse which was omitted.
 19 At 16° after sunset.
 20' Month XI, the 13th, moonset to sunrise: 1°; measured (despite) clouds.
 21 Lunar eclipse which was omitted.
 22 At 70°' after sunrise.
 23 [Night] of the 29th, [...]

II

- 1 Year 150, king Antiochus.
 2 Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 30'; clouds, I did not watch.
 3 The 13th. moonset to sunrise: 7° 30'; I did not watch.
 4 The 14th. sunrise to moonset: 1° 20'; clouds, I did not watch.
 5 The 15th. moonrise to sunset: 2° 20'; clouds, I did not watch.
 6 The 16th. sunset to moonrise: 10°; clouds, I did not watch.
 7 The 27th. moonrise to sunrise: 14° 30'; clouds, I did not watch.
 8 Month II, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 23° 40'; clouds, I did not watch.
 9 The 13th. moonset to sunrise: 4° 20'; clouds, I did not watch.
 10 The 14th. moonrise to sunset: 6° 10'; clouds, I did not watch.
 11 [The 14th.] sunrise to moonset: 5° 10'; I did not watch.
 12 [The 15th.] sunset to moonrise: [x]+5°; clouds, I did not watch.
 13 The 26th. moonrise to sunrise:; I did not watch.
 14 Month III, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 17°; it was bright, erathshine.
 15 measured: it was low to the sun.
 16 The 14th. moonset to sunrise: 1° 40'.
 17 The 15th. moonrise to sunset: 5°; measured (despite) mist.
 18 The 15th. sunrise to moonset: 10°; measured (despite) mist.
 19 The 16th. sunset to moonrise: 8° 10'; I did not [watch.]
 20 The 27th. moonrise to sunrise: 17°; I did not [watch.]
 21 Month IV, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 20+[x°]

III

1	'IZI 30'	15	na-su	DIR	muš
2	14	5	ŠÚ		
3	15	2	MI (error for ME)	DIR	NU PAP
4	15	8	na a-kam	muš	
5	16	9	GE ₆	muš	
6	28 ²	18.30	KUR	muš	
7	KIN 1	15,30	na-su	KUR ₄	a-pir muš
8	13	12	ŠÚ		
9	14	4	ME a-kam	muš	
10	14	4	na a-kam	muš	
11	15	7,30	GE ₆		
12	27	16	KUR	a-kam	muš
13	DU ₆ 1	21	na-su	KUR ₄	a-pir muš
14	ina	GUB IGI	ana šamáš	NIM	
15	13	5,40	ME	NU PAP	
16	13	3	'ŠÚ'	[...]	
17	14	3+[x	GE ₆]	
18	'14'	[... na]		

IV

1	GAN 1	'17,30'	na-su	KUR ₄	a-p[ir x]
2	ina	GUB IGI	ana šamáš	NIM	
3	12	16,20	ŠÚ	DIR	NU PAP
4	13	6,30	ME	DIR	muš
5	13	2,40	na	DIR	NU PAP
6	14	6	GE ₆	a-kam	muš
7	27	19,30	KUR	muš	
8	AB 1	23,10	DIR	NU PAP	
9	12	9,20	ŠÚ	DIR	N[U PAP]
10	13	2,40 ²	[ME]	
11	13	[x	na]	
12	'14'	[x	GE ₆]	

Comments

Obv. 22'f.: Mars passes β Arietis before α Arietis, so the listing of α in line 22' may be an error, since another of the two stars is listed in line 23'.

Rev. I 15'-17': lunar eclipse of -161 Aug 14.

I 18'f.: solar eclipse of -161 Aug 28.

I 20'-22': lunar eclipse of -160 Feb 7.

III

1	Month V, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 15°; measured (despite) clouds.
2	The 14th. moonset to sunrise: 5°.
3	The 15th. moonrise to sunset: 2°; clouds, I did not watch.
4	The 15th. sunrise to moonset: 8°; measured (despite) mist.
5	The 16th. sunset to moonrise: 9°; measured.
6	The 28th. moonrise to sunrise: 18° 30'; measured.
7	Month VI, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 15° 30'; it was bright, earthshine, measured.
8	The 13th. moonset to sunrise: 12°.
9	The 14th. moonrise to sunset: 4°; measured (despite) mist.
10	The 14th. sunrise to moonset: 4°; measured (despite) mist.
11	The 15th. sunset to moonrise: 7° 30'.
12	The 27th. moonrise to sunrise: 16°; measured (despite) mist.
13	Month VII, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 21°; it was bright, earthshine, measured;
14	it could be seen while (the sun) stood there; it was high to the sun.
15	The 13th. moonrise to sunset: 5° 40'; I did not watch.
16	The 13th. moonset to sunrise: 3° [...]
17	The 14th. [sunset to moonrise:] 3+[x°]
18	The 14th. [sunrise to moonset:]

IV

1	Month IX, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 17° 30'; it was bright, earthshine, [...]
2	it could be seen while (the sun) stood there; it was high to the sun.
3	The 12th. moonset to sunrise: 16° 20'; clouds, I did not watch.
4	The 13th. moonrise to sunset: 6° 30'; measured (despite) clouds.
5	The 13th. sunrise to moonset: 2° 40'; clouds, I did not watch.
6	The 14th. sunset to moonrise: 6°; measured (despite) mist.
7	The 27th. moonrise to sunrise: 19° 30'; measured.
8	Month X, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 23° 10'; clouds. I did not watch.
9	The 12th. moonset to sunrise: 9° 20'; clouds, I did not [watch.]
10	The 13th. [moonrise to sunset:] 2° 40' [...]
11	The 13th. [sunrise to moonset:]
12	The 14th. [sunset to moonrise:]

No. 51

BM 45794 + 45834 (= 81-7-6, 212+257)

Listed as LBA *1265a (45794)

Photo: Pl. 36

Goal year: SE 168

Flake

- 1' [.... DELE šá IG]I ABSIN 'x' [....]
- 2' [MU-1-me-1-šu-KAM ¹De-met-ri] LUGAL BAR 26 10 UŠ 'na dele-bat in x dele-bat' ina ŠÚ ina [x ŠÚ]
- 3' [.... na-s]u in 9 IGI SIG GE₆ 18 ina ZÁLAG dele-bat SIG šur GIGIR šá SI 3' ½' [KÜŠ]
- 4' [.... SIG M]ÚL IGI šá še-pit MAŠ-MAŠ 1 KÜŠ GE₆ 9 ina ZÁLAG dele-bat SIG MÚL ár šá š[e-pit] MAŠ-MAŠ]
- 5' [.... x]+2 KÜŠ GE₆ 23 ina ZÁLAG dele-bat SIG MAŠ-MAŠ IGI 4 ½ KÜŠ GE₆ 27' 'ina ZÁLAG' [....]
- 6' [.... MÚ]L ár šá ALLA šá ULÙ ½ KÜŠ GE₆ 21 ina ZÁLAG dele-bat SIG SAG 'A' [....]
- 7' [....] 'x' ina ZÁLAG dele-bat SIG <MÚL> TUR šá 4 KÜŠ ár ^{mú}LUGAL 1 SI TE GE₆ 12 [....]
- 8' [.... GÌR ár šá] A TE ana 1-en MÚL GUR^{meš} DU₆ GE₆ 3 ina ZÁLAG dele-bat SIG [....]
- 9' [.... API]N GE₆ 2 ina ZÁLAG dele-bat e RÍN šá ULÙ 8 [SI]
- 10' [....] e MÚL e šá SAG GÍ[R-TAB x] 'x GE₆ 20+x ina' ZÁLAG dele-bat e SI₄ 2 2/3 KÜŠ GAN [....]
- 11' [.... ina] NIM ina SAG GU ŠÚ DIR' NU PAP ŠE 29 dele-bat ina ŠÚ ina HUN 'IGI' x [....]
- 12' [MU-1-me-22-KAM ¹A]n LUGAL BAR 2 GU₄-UD ina ŠÚ ina MÚL-MÚL IGI NU PAP GE₆ 5 USAN [....]
- 13' [....] GU₄-UD SIG šur GIGIR šá SI 1 ½ KÜŠ GE₆ 15 USAN GU₄-UD e [šur GIGIR šá ULÙ]
- 14' [.... GU₄-U]D e MÚL IGI šá še-pit MAŠ-MAŠ 1 ½ KÜŠ GE₆ 23 USA[N]
- 15' [....] e MAŠ-MAŠ šá SIPA 4 KÜŠ GU₄ '8' GU₄-UD' ina ŠÚ ina 'x' ŠÚ [....]
- 16' [.... n]a-su in 10 IGI GE₆ 20 [....]
- 17' [.... G]U₄-UD ina NIM ina R[ÍN IGI]

No. 51

Flake

- 1' [.... γ] Virginis [....]
- 2' [Year 160,] king [Demetrius.] Month I, the 26th, sunset to setting of Venus: 10°. Around the xth, Venus' [last appearance] in the west in [....]
- 3' [....] rising of Venus to sunrise: [....]; (ideal) first appearance on the 9th. Month III, night of the 18th, last part of the night, Venus was 3 ½ [cubits] below β Tauri [....]
- 4' [....] 1 cubit [below] η Geminorum. Night of the 9th, last part of the night, Venus was [....] below μ Geminorum. [....]
- 5' [.... x]+2 cubits [....] Night of the 23rd, last part of the night, Venus was 4 ½ cubits below α Geminorum. Night of the 27th¹, last part of the night, [....]
- 6' [....] ½ cubit [....] δ Cancrī. Night of the 21st, last part of the night, Venus was [....] below ε Leonis. [....]
- 7' [....], last part of the night, Venus was 1 finger below ρ Leonis; it came close. Night of the 12th, [....]
- 8' [....] came close [to β Virgī]nis, they turned into one star. Month VII, night of the 3rd, last part of the night, Venus was [....] below [....]
- 9' [.... Mon]th VIII, night of the 2nd, last part of the night, Venus was 8 [fingers] above α Librae. [....]
- 10' [....] above β Scorpīi. Night of the 24th¹, last part of the night, Venus was 2 2/3 cubits above α Scorpīi. Month IX, [....]
- 11' [....] last appearance in the east in the beginning of Aquarius; clouds, I did not watch. Month XII, the 29th, Venus' first appearance in the west in Aries [....]
- 12' [Year 122,] king Antiochus. Month I, the 2nd, Mercury's first appearance in the west in Taurus; I did not watch. Night of the 5th, first part of the night, [....]
- 13' [....] Mercury was 1 ½ cubits below β Tauri. Night of the 15th, first part of the night, Mercury was [....] above [ζ Tauri]
- 14' [.... Mercu]ry was 1 ½ cubits above η Geminorum. Night of the 23rd, first part of the night, [....]
- 15' [....] 4 cubits above γ Geminorum. Month II, the 8th, Mercury's last appearance in the west in [....]
- 16' [....] sunset to setting of Mercury: [....] (ideal) first appearance on the 10th. Night of the 20th, [....]
- 17' [.... M]ercury's [first appearance] in the east in Lib[ra]

No. 52

BM 34145 (= Sp 247)

Copy: LBA 1268

Photo: Pl. 37

Bibliography: L. Brack-Bernsen, SEAC 5th (1999) 23

Goal year: SE 170

On this tablet, the lunar data are presented first on the obverse; planetary data, beginning with Jupiter, follow at the end of the obverse.

Obv.

Col. I broken;

II

- 1' [...] 'x' [x]
 2' [...] 'x x'
 3' [...] DI]R NU PAP
 4' 'x' [...] NU PAP
 5' [...] 10 [x] NU PAP
 6' [...] NU PAP
 7' [...] NU] PAP
 8' [...] 'muš'
 9' [...] NU PAP
 10' [...] DIR NU PAP
 11' [...] 'DIR' NU PAP
 12' [...] muš
 13' [...] muš
 14' [...] m[uš]
 15' [...] 'x' muš
 16'-21' (broken)
 22' [...] 'muš'
 23' [...] ŠÚ muš
 24' [...] ME muš
 25' [...] na muš
 26' [...] GE₆ muš
 27' [...] KUR muš

III

- 1 [ŠU x x] 'x x' [...]
 2 [x]9² ŠÚ N[U PAP²]
 3 14 8,30 ME [...]
 4 15 4 [GE₆ [...]
 5 15 12 na [...]
 6 27 20 KUR [...]
 7 IZI 30 15 na-su KUR₄ [x x] muš
 8 14 8,40 ŠÚ DIR muš
 9 15 30 NINDA ME muš
 10 15 4¹,30 na DIR muš
 11 16 9¹ 'GE₆' DIR muš

No. 52

Obv.

I broken;

II

- 1'-2' [...]
 3' [...] clouds, I did not watch
 4' [...] [...] I did not watch.
 5' [...] 10' [...] I did not watch.
 6' [...] I did not watch.
 7' [...] I did not] watch.
 8' [...] measured.
 9' [...] I did not watch.
 10' [...] clouds, I did not watch.
 11' [...] clouds, I did not watch.
 12'-14' [...] measured.
 15' [...] measured.
 16'-21' (broken)
 22' [...] measured.
 23' [...] moonset to sunrise: [...] measured.
 24' [...] moonrise to sunset: [...] measured.
 25' [...] sunrise to moonset: [...] measured.
 26' [...] sunset to moonrise: [...] measured.
 27' [...] moonrise to sunrise: [...] measured.

III

- 1 [Month IV,] [...]
 2 [The xth,] moonset to sunrise: 9°²; I did not [watch.]
 3 The 14th, moonrise to sunset: 8° 30' [...]
 4 The 15th, [sunset to moonrise:] 4° [...]
 5 The 15th, sunrise to moonset: 12° [...]
 6 The 27th, moonrise to sunrise: 20° [...]
 7 Month V, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 15°; it was bright, [...] measured.
 8 The 14th, moonset to sunrise: 8° 40'; measured (despite) clouds.
 9 The 15th, moonrise to sunset: 30'; measured.
 10 The 15th, sunrise to moonset: 4°¹ 30'; measured (despite) clouds.
 11 The 16th, sunset to moonrise: 9°; measured (despite) clouds.

- 12 27 9 KUR *muš*
 13 KIN 30¹ 'x¹ [x x x] 'x¹
 14 10+[x]5,30 ME *m[uš]*
 15 [x] '5¹,20 ŠÚ *muš*
 16 [x] '5¹,20¹¹ GE₆ *muš*
 17 [....] *muš*
 18 [.... NU] PAP
 19 [....] KAM
 20 'x¹ 10+[x],30 ŠÚ
 21 14¹ 20+[x] [x] *muš*
 22 10+[x]'x x x¹ [x m]*uš*
 23 10+[x]9 [....]
 24 27 [x]+4 K[UR]
 25 APIN 1 16,30 *na¹-su* KUR₄¹ *a¹ muš²*
 26 14 7 ME DIR *muš*
 27 14 7 ŠÚ DIR *muš*
 28 15 2,40 GE₆ DIR *muš*

IV

- 1' 'x x¹ [....]
 2' 14 'x¹ [....]
 3' 15 [....]
 4' 27 14+[x]
 5' AB 1 16¹ *na-su* [....]
 6' 10+[x]1,10+[x]
 7' 14 [x],20 [....]
 8' 10+[x]12+[x]
 9' [....]
 10' 20+[x]
 11' [ZÍZ]
 12' 12 [....]
 13' 13 [....]
 14' 13 8,50 [....]
 15' 14 8,50 G[E₆]
 16' 26 12,50¹ [KUR]
 17' ŠE 30 '17¹,20¹¹+'x¹ [....]
 18' *ina* GUB IGI [*ana*] *šamáš* [x]
 19' 1[2] 6¹,30¹ ŠÚ¹
 20' 13 [x],30 ME *a-kam muš*
 21' [13 x],30 *na a-kam muš*
 22' 1[4] [x]+6,40 GE₆ *muš*
 23' 27 8 KUR DIR NU PAP

- 12 The 27th, moonrise to sunrise: 9°, measured.
 13 Month VI, (the 1st of which was identical with) the 30th¹ (of the preceding month,) sunset to moonset: [....]
 14 The 10+[xth,] moonrise to sunset: 5° 30'; measured.
 15 [....] moonset to sunrise: 5°? 20'; measured.
 16 [....] sunset to moonrise: 5°? 20'?; measured.
 17 [....] sunrise to moonset:] measured.
 18 [.... I did not] watch.
 19 [....]
 20 The xth, moonset to sunrise: 10+[x°] 30'.
 21 The 14th¹, [....] 20+[x']; measured.
 22 The 10+[xth,] measured.
 23 The 10+[xth,] measured.
 24 The 27th, moonrise [to sunrise:] [x]+4° [....]
 25 Month VIII, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 16° 30'; it was bright¹, measured (despite) mist¹.
 26 The 14th, moonrise to sunset: 7°; measured.
 27 The 14th, moonset to sunrise: 7°; measured.
 28 The 15th, sunset to moonrise: 2° 40'; measured (despite) clouds.

IV

- 1' [....]
 2' The 14th, [....]
 3' The 15th, [....]
 4' The 27th, [moonrise to sunrise:] 14+[x°]
 5' Month X, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 16° [....]
 6' The 10+[xth,] 1° 10+[x']
 7' The 14th, [....] 20' [....]
 8' The 10+[xth,] 12+[x°]
 9' [....]
 10' The 20+[xth,]
 11' [Month XI,]
 12' The 12th, [moonset to sunrise:]
 13' The 13th, [moonrise to sunset:]
 14' The 13th, [sunrise to moonset:] 8° 50' [....]
 15' The 14th, sunset [to moonrise:] 8° 50' [....]
 16' The 26th, [moonrise to sunrise:] 12° 50' [....]
 17' Month XII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 17°? 20'? [....]
 18' it could be seen while (the sun) stood there; it was [.... to] the sun.
 19' The 1[2th,] moonset to sunrise: 6°? 30'¹
 20' The 13th, moonrise to sunset: [x°] 30'; measured (despite) mist.
 21' [The 13th,] sunrise to moonset: [x°] 30'; measured (despite) mist.
 22' The 1[4th,] sunset to moonrise: [x]+6° 40'; measured.
 23' The 27th, moonrise to sunrise: 8°; clouds, I did not watch.

- 24' BAR 1 24' *na-su* KUR₄ *a-pir muš*
 25' *ina* GUB <IGI> *ana šamáš* NIM

(The following is written across the whole width of the tablet)

- 1 [...] 'x x EN¹ 12 MÚL-BABBAR *ana* ŠÚ *ki* UŠ-*a* ½ KÙŠ *ina* IGI RÍN *šá* ULÙ UŠ DU₆
 20 MÚL-BABBAR
 2 [*ina* x ŠÚ] ŠE EN 23 MÚL-BABBAR *ana* NIM *ki* UŠ-*ú* 1 ½ KÙŠ 'ár¹ [MÚL K]UR *šá*
 KIR₄ *šil* PA UŠ ŠE DIR
 3 [...] 'x¹ 5¹ 9¹ IZI GE₆¹ 7 [x x] 'x x x¹

'Rev.

- 1' [...] 'x x¹ [...]
 2' [...] ŠE¹ GE₆ 3 U[SAN] 'dele-bat¹ x¹ [... GE₆] 13¹ 'USAN *dele-bat* x¹
 3' [*is* le₁₀ *dele-bat* SIG *šur* GIGIR] *šá* SI 1 KÙŠ [x] U GE₆ 26¹ U[SAN *dele-bat e šu*]r
 GIGIR *šá* ULÙ 1 2/3 KÙŠ

- 4' [...] 'x¹ GE₆ [...] 'x x¹ [...] 'x MÚL¹-MÚL ŠÚ NU PAP
 5' [...] '17¹ x x¹ [...]
 6' [...] 'x x¹ [...]
 7' [...] 'x¹ [...]
 8'-13' (broken)
 14' [...] 'x x¹ [...]
 15' [...] 'MÚL ŠÚ x¹ [...]
 16' [...] 'x¹ [...] *šá* SAG HUN 4+[x KÙŠ]

- 17' [...] 'SIG GE₆¹ 14 *ina* ZALÁG¹ AN SIG MÚL KUR *šá* [DUR *nu-nu*]
 18' [...] 'GE₆ 5¹ [*ina* ZAL]ÁG AN SIG MÚL 'ár *šá* [SAG HUN]
 19' [...] 'x¹ [...]
 20' [...] 'AN *e šur* GIGIR *šá*¹ ULÙ [...]
 21' [...] AN *e* MÚL *ár šá še-pít* MAŠ-MAŠ 1 KÙŠ DIR-ŠE 10+[x]

- 22' [...] DIB-*qa*^{meš} u AN-KU₁₀^{meš} *šá ana* [...]

Date

The date can be determined by combining the Jupiter data in Obv. 1-2 (71 years before the goal-year) with the last line of the Mars paragraph (Rev. 21') stating that Mars passed μ Geminorum near the end of a year which had an intercalary Addar (47 years before the goal-year).

Comments

Obv. III 2f.: ŠÚ and ME seem to be interchanged.

Rev. 2': computation yields XII 5 for Venus passing η Tauri; XII 13 fits α Tauri (star name not preserved).

- 24' Month I, the 1st (of which followed the 30th of the preceding month,) sunset to moonset:
 24^o; it was bright, earthshine, measured;
 25' <it could be seen> while (the sun) stood there; it was high to the sun.

(The following is written across the whole width of the tablet)

- 1 [...] until the 12th, when Jupiter became stationary to the west, it became stationary
 ½ cubit in front of α Librae. Month VII, the 20th, Jupiter's
 2 [last appearance in] Month XII, until the 23rd, when Jupiter became stationary to
 the east, it became stationary 1 ½ cubits behind θ Ophiuchi. Month XII was intercalary.
 3 [...] Month V, night¹ of the 7th, [...]

'Rev.

- 1' [...] [...]
 2' [...] Month XII¹, night of the 3rd, first part of the night, Venus was [.... Night] of the
 13th¹, first part of the night, Venus was
 3' [...] above α Tauri Venus was] 1 cubit [x] fingers [below] β [Tauri.] Night of the 26th¹,
 first part of the [night, Venus was] 1 2/3 cubits [above] ζ Tauri.

- 4' [...] night [...] [...] last appearance in Taurus; I did not watch.
 5' [...] 17th¹ [...]
 6'-7' [...] [...]
 8'-13' (broken)
 14' [...] [...]
 15' [...] [...]
 16' [...] 4+[x cubits] Arietis [...]

- 17' [...] Month III, night of the 14th, last part of the night, Mars was [...] below η Piscium
 [...]
 18' [...] night of the 5th¹, [last part] of the night, Mars was [...] below α [Arietis]
 19' [...] [...]
 20' [...] Mars was [...] above ζ Tauri [...]
 21' [...] 1 cubit [above] μ Geminorum. Month XII₂, the 10+[xth,]

- 22' [...], passings and eclipses which were [established] for [...]

No. 53

BM 34968 + 35040 (= Sp II 490+569+579)

Copies: LBA 1269 (34968), 1270 (35040)

Photo: Pl. 38

Goal year: SE 171

'Obv.'

- 1' [....] 'x x x ŠÚ' x' [....]
- 2' [.... G]E₆ 1 USAN MÚL-BABBAR e MÚL KUR šá KIR₄ šil PA [nn mm]
- 3' [MU-1-me-1-šu-3-KAM ¹A-le]k² LUGAL BAR GE₆ 4 USAN *dele-bat* e MÚL IGI šá še-pít MAŠ-MAŠ 1 KÙŠ 8 SI GE₆ 6 USA[N]
- 4' [.... x]+1 SI *ana* NIM DIB GE₆ 9 USAN *dele-bat* e MAŠ-MAŠ šá SIPA 4 KÙŠ <GE₆> 19 USAN [....]
- 5' [....] GU₄ GE₆ 8 USAN *dele-bat* e MÚL ár šá ALLA šá ULÙ 1 KÙŠ GE₆ 22 [....]
- 6' [.... US]AN *dele-bat* SIG LUGAL 4 SI ŠU 1 12 *na dele-bat in* 6 *dele-bat ina* ŠÚ *ina* SAG A ŠÚ [....]
- 7' [.... i]n 20 IGI IZI GE₆ 23 *ina* ZÁLAG *dele-bat* SIG SAG A 6 KÙŠ KIN GE₆ '5'1 [....]
- 8' GE₆ 13 [*ina* ZÁLAG *dele-bat* SIG MÚL TUR šá] 4 KÙŠ ár LUGAL 1 KÙŠ GE₆ 23 *ina* ZÁLAG *dele-bat* SIG GIŠ.KUN A 5 [KÙŠ]
- 9' GÍR ár šá [A nn mm] GE₆ 18 *ina* ZÁLAG *dele-bat* SIG DELE šá IGI ABSIN 2/3 KÙŠ APIN GE₆ 1+[x]
- 10' GE₆ 19 *ina* ZÁLAG *dele-bat* 'e RÍN šá ULÙ' 1/2² KÙŠ GE₆ 21 'ina ZÁLAG' *dele-bat* SIG RÍN šá SI 2 1/2 KÙŠ *dele-bat* 2 [SI]
- 11' e MÚL e šá SAG GÍR-TAB 8 SI GE₆ 10 *ina* ZÁLAG *dele-bat* e SI₄ 3 KÙŠ GE₆ 20² *ina* ZÁLAG *dele-bat* e MÚL K[UR šá KIR₄ šil PA]
- 12' *ina* ZÁLAG *dele-bat* SIG SI MÁŠ 2 KÙŠ ZÍZ GE₆ 8 *ina* ZÁLAG *dele-bat* e MÚL IGI šá SUḪUR MÁŠ 1 KÙŠ GE₆ 10+[x *ina* ZÁLAG *dele-bat* e MÚL ár šá SUḪUR MÁŠ]
- 13' 1 KÙŠ *dele-bat* 6 SI *ana* NIM DIB ŠE 16 9 *na dele-bat in* 20 *dele-bat ina* NIM *ina* zib^{me} ŠÚ
- 14' MU-1-me-25-KAM ¹An u ¹Se A-šú LUGAL^{meš} BAR 25 GU₄-UD *ina* NIM UD-DA IGI DIB GU₄ 9 GU₄-UD *ina* N[IM]
- 15' [*ina*] ŠÚ *ina* ALLA IGI KUR 15 *na-su in* 2 IGI GE₆ 16 USAN GU₄-UD SIG SAG A 5 KÙŠ GE₆ 21 U[AN] GU₄-UD 'x' [....]
- 16' [Š]U 14 ŠÚ šá GU₄-UD *ina* ŠÚ *ina* A TA 12 ki PAP NU IGI IZI 14 GU₄-UD *ina* NIM *ina* A 3 KÙŠ ár LUGAL *ana* NIM G[UB' IGI]

No. 53

'Obv.'

- 1' [....] last appearance' [....]
- 2' [.... ni]ght of the 1st, first part of the night, Jupiter was [....] above ♂ Ophiuchi.
- 3' [Year 163.] king [Alexande]r. Month I, night of the 4th, first part of the night, Venus was 1 cubit 8 fingers above η Geminorum. Night of the 6th, first part of the night, [....]
- 4' [....] having passed [x]+1 fingers to the east. Night of the 9th, first part of the night, Venus was 4 cubits above γ Geminorum. <Night> of the 19th, first part of the night, [....]
- 5' [....] Month II, night of the 8th, first part of the night, Venus was 1 cubit above δ Cancrī. Night of the 22nd, [....]
- 6' [.... first] part of the night, Venus was 4 fingers below α Leonis. Month IV, the 1st, sunset to setting of Venus: 12°. Around the 6th, Venus' last appearance in the west in the beginning of Leo [....]
- 7' [....] (ideal) first appearance on the 20th. Month V, night of the 23rd, last part of the night, Venus was 6 cubits below ε Leonis. Month VI, night of the 5th², [....]
- 8' Night of the 13th, [last part of the night, Venus was] 1 cubit [below q] Leonis. Night of the 23rd, last part of the night, Venus was 5 [cubits] below ♂ Leonis. [....]
- 9' [....] β Virginis. Night of the 18th, last part of the night, Venus was 2/3 cubit below γ Virginis. Month VIII, night of the 1+[xth,]
- 10' Night of the 19th, last part of the night, Venus was 1/2² cubit above α Librae. Night of the 21st, last part of the night, Venus was 2 1/2 cubits below β Librae, Venus [....] 2 [fingers]
- 11' 8 fingers above β Scorpī. Night of the 10th, last part of the night, Venus was 3 cubits above α Scorpī. Night of the 20th², last part of the night, Venus was [....] above ♂ [Ophiuchi]
- 12' last part of the night, Venus was 2 cubits below β Capricorni. Month XI, night of the 8th, last part of the night, Venus was 1 cubit above γ Capricorni. Night of the 10+[xth, last part of the night, Venus was]
- 13' 1 cubit [above δ Capricorni], Venus having passed 6 fingers to the east. Month XII, the 16th, rising of Venus to sunrise: 9°. Around the 20th, Venus' last appearance in the east in Pisces.
- 14' Year 125, kings Antiochus and his son Seleucus. Month I, the 25th, Mercury's first appearance in the east, omitted. Month II, the 9th, Mercury's [last appearance] in the east [....]
- 15' first appearance in the west in Cancer; it was bright, sunset to setting of Mercury: 15°; (ideal) first appearance on the 2nd. Night of the 16th, first part of the night, Mercury was 5 cubits below ε Leonis. Night of the 21st, first [part of the night,] Mercury was [....]
- 16' Month IV, the 14th, Mercury's last appearance in the west in Leo: from the 12th, when I watched I did not see it. Month V, the 14th, Mercury's [first appearance] in the east in Leo, [standing²] 3 cubits behind α Leonis to the east;

- 17' [KUR²N]IM-a 18 na-su in 9 IGI KIN 1 11 na GU₄-UD in 2 GU₄-UD ina NIM ina SAG²
ABSIN ŠÚ APIN 1 GU₄-[UD ina ŠÚ]
- 18' [ina] GÍR-TAB ina IGI sin 1½ KÜŠ ana ŠÚ GUB IGI KUR NIM-a 15 na-su in 28 šá
DU₆ IGI 15 ŠÚ šá GU₄-UD ina ŠÚ ina PA [...]
- 19' [x] GU₄-UD ina NIM ina GÍR-TAB IGI KUR NIM-a 16 na-su in 24 IGI GAN GE₆ 8 ina
ZÁLAG GU₄-UD e MÚL KUR šá [KIR₄ šil PA]
- 20' 'x' KÜŠ AB 8 GU₄-UD ina NIM ina MÁŠ ŠÚ NU PAP ZÍZ 14 GU₄-UD ina ŠÚ ina zib^{me}
2½ KÜŠ ár dele-bat ana N[IM GUB IGI]
- 21' [KU]R NIM-a 16 na-su in 12 IGI ŠE in 1 GU₄-UD ina ŠÚ ina TIL zib^{me} ŠÚ NU PAP
-
- 22' [MU-1]-me-12-KAM ¹An u ¹An A-šú LUGAL^{meš} BAR EN 28² GENNA ana ŠÚ ki UŠ-a
2½ KÜŠ ár GÍR ár š[á A]
- 23' [ŠÚ šá] GENNA ina ABSIN TA 'x ki' PAP NU IGI KIN 27 GENNA ina ABSIN 1½
KÜŠ ár DELE šá IGI ABSIN IGI KUR [...]
- 24' [GAN] in EN 29 GENNA ana NIM ki UŠ-ú 2 KÜŠ ina IGI SA₄ šá ABSIN UŠ
-
- 25' [MU-1,32-KAM] ¹An LUGAL ŠU 8 16 na šá AN in 10 AN ina A ŠÚ APIN 5 AN [...]
-
- 26' [MU-1-me-23-KAM DI]R-ŠE GE₆ 24 USAN 'AN SIG MAŠ-MAŠ IGI x' [x x x] 'x' [...]
- 27' [...] 'x x' [...]

- 17' [it was bright' (and)] high, rising of Mercury to sunrise: 18°; (ideal) first appearance on
the 9th. Month VI, the 1st, rising of Mercury to sunrise: 11°. Around the 2nd, Mercury's
last appearance in the east in the beginning² of Virgo. Month VIII, the 1st, Mercury's
- 18' first appearance [in the west in] Scorpius, it stood 1½ cubits in front of the moon to the
west; it was bright (and) high, sunset to setting of Mercury: 15°; (ideal) first appearance
on the 28th of month VII. The 15th, Mercury's last appearance in the west in Sagittarius
[...]
- 19' [The xth,] Mercury's first appearance in the east in Scorpius; it was bright (and) high,
rising of Mercury to sunrise: 16°; (ideal) first appearance on the 24th. Month IX, night
of the 8th, last part of the night, Mercury was x cubits above θ [Ophiuchi.]
- 20' Month X, the 8th, Mercury's last appearance in the east in Capricorn; I did not watch.
Month XI, the 14th, Mercury's [first appearance] in the west in Pisces, [it stood] 2½
cubits behind Venus to the east;
- 21' [it was bright (and) high, sunset to setting of Mercury: 16°; (ideal) first appearance on
the 12th. Month XII, around the 1st, Mercury's last appearance in the west in the end of
Pisces; I did not watch.
-
- 22' [Year 1]12, kings Antiochus and his son Antiochus. Month I, until the 28th², when Saturn
became stationary to the west, [it became stationary] 2½ cubits behind β Vir[ginis.]
- 23' Saturn's [last appearance] in Virgo: from the xth, when I watched I did not see it. Month
VI, the 27th, Saturn's first appearance in Virgo, 1½ cubits behind γ Virginis; it was
bright [...]
- 24' [Month IX,] around until the 29th, when Saturn became stationary to the east, it became
stationary 2 cubits in front of α Virginis.
-
- 25' [Year 92,] king Antiochus. Month IV, the 8th, sunset to setting of Mars: 16°. Around the
10th, Mars' last appearance in Leo. Month VIII, the 5th, Mars' [first appearance]
-
- 26' [Year 123,] month XII₂, night of the 24th, first part of the night, Mars was [...] below α
Geminorum [...]
- 27' [...] [...]

No. 54

BM 33472 (= Rm 4, 26) + 33524 + 33721 + unnumb.

Photo: Pl. 38

Goal year: SE 175

Upper edge

1 [ina a-mat] ^dEN u ^dGAS[AN-ia] 'liš'-lim

Obv.:

1 'MU-1,44¹-KAM ¹A[n u] ¹An A-šú LUGAL^{meš} BAR 10² 'MÚL¹-BABBAR [ina x IGI]

2 IZI in EN 11² MÚL-'BABBAR¹ ana NIM ki UŠ-ú 3½² K[ÛŠ]

3 DU₆ in 10 MÚL-BABBAR ina ME E-a 'GAN 11¹ [x] 'x x x x¹ [....]

4 'DIR-ŠE¹ 21 'MÚL-BABBAR¹ ina 'MÚL-MÚL ŠÚ¹ N[U¹ PAP¹]

5 MU-1,31-KAM ŠE DIR MU-1,32-[KAM ¹An LU]GAL BAR GE₆ 11 ina ZÁLAG M[ÚL-BABBAR]

6 GU₄ GE₆ 2 ina ZÁLAG MÚL-BABBAR SIG MÚL IGI[I šá SAG] HUN 4 KÛŠ GE₆ 24 [....]

7 KIN GE₆ 12 ina ZÁLAG MÚL-BABBAR ana ŠÚ ina LAL-šú S[IG MÚL]L ár šá SAG HUN 4 K[ÛŠ]

8 SIG MÚL IGI šá SAG HUN 3½ KÛŠ GAN G[E₆] 26² USAN MÚL-BABBAR 'x¹ [....]

9 AB GE₆ 26 USAN MÚL-BABBAR SIG MÚL ár šá SAG HUN 5 KÛŠ [....]

10 MU-'1-me¹-1-šu-7-KAM ¹De-met-ri LUGAL BAR GE₆ 21 ina ZÁLAG dele-bat SIG [MÚL KUR šá DUR nu-nu nn mm]

11 S[IG] MÚL IGI šá SAG HUN 4½ KÛŠ GU₄ GE₆ 2 ina ZÁLAG dele-bat SIG 'MÚL¹ [ár šá SAG HUN nn mm]

12 S[IG M]ÚL-MÚL 2 KÛŠ GE₆ 28² ina ZÁLAG dele-bat e is le₁₀ 2 KÛŠ SIG GE₆ [....]

13 29 ŠÚ šá dele-bat ina NIM ina MAŠ-MAŠ TA 25 ki PAP NU IGI KIN 17 dele-bat [....]

14 in 15² IGI GAN GE₆ 10 USAN dele-bat SIG SI MÁŠ 3 KÛŠ GE₆ 10+[x]

15 dele-bat 2 U ana ŠÚ LAL GE₆ 25 USAN dele-bat e MÚL ár šá SUHUR MÁŠ [nn mm ZÍZ x USAN dele-bat]

16 SIG MÚL KUR šá DUR nu-nu 2 KÛŠ GE₆ 26² USAN dele-bat SIG MÚL [IGI šá SAG HUN nn mm]

17 SIG MÚL ár šá SAG HUN 4 KÛŠ ŠE GE₆ 21 USAN dele-bat SIG MÚL-[MÚL nn mm]

18 DIR-ŠE GE₆ 7 USAN dele-bat e is le₁₀ [nn mm] GE₆ 2'4¹ U[SAN]

19 'MU-1-me¹-29²-KAM ¹Se LUGAL BAR '11 x x x x¹ [....]

20 (traces)

No. 54

Upper edge

1 [At the command] of Bel and Beltija may it go well.

Obv.:

1 Year 104, kings Antiochus and his son Antiochus. Month I, the 10th, Jupiter's [first appearance in]

2 Month V, around until the 11th², when Jupiter became stationary to the east, [it became stationary 3½² cu[bits]

3 Month VII, around the 10th, Jupiter's acronychal rising. Month IX, the 11th, [....] [....]

4 Month XII₂, the 21st, Jupiter's last appearance in Taurus; I did not² [watch¹.]

5 Year 91: month XII was intercalary. Year 92, king [Antiochus.] Month I, night of the 11th, last part of the night, J[upiter]

6 Month II, night of the 2nd, last part of the night, Jupiter was 4 cubits below β Arieits. Night of the 24th, [....]

7 Month VI, night of the 12th, last part of the night, Jupiter, while moving back to the west, was 4 cubits below α Arietis. [....]

8 3½ cubits below β Arietis. Month IX, night of the 26th², first part of the night, Jupiter [....]

9 Month X, night of the 26th, first part of the night, Jupiter was 5 cubits below α Arietis. [....]

10 Year 167, king Demetrius. Month I, night of the 21st, last part of the night, Venus was [....] below [η Piscium]

11 4½ cubits below β Arietis. Month II, night of the 2nd, last part of the night, Venus was [....] below [α Arietis]

12 2 cubits below η Tauri. Night of the 28th², last part of the night, Venus was 2 cubits above α Tauri. Month III, night [....]

13 The 29th, last appearance of Venus in the east in Gemini: from the 25th, when I watched I did not see it. Month VI, the 17th, Venus' [first appearance in the west in]

14 (ideal) first appearance on the 15th². Month IX, night of the 10th, first part of the night, Venus was 3 cubits below β Capricorni. Night of the 10+[xth,]

15 Venus being 2 fingers back to the west. Night of the 25th, first part of the night, Venus was [....] above δ Capricorni. [Month XI, the xth, first part of the night, Venus was]

16 2 cubits below η Piscium. Night of the 26th², first part of the night, Venus was [....] below [β Arietis]

17 4 cubits below α Arietis. Month XII, night of the 21st, first part of the night, Venus was [....] below η Tau[ri]

18 Month XII₂, night of the 7th, first part of the night, Venus was [....] above α Tauri. Night of the 24th, first [part of the night,]

19 Year 129, king Seleucus. Month I, the 11th, [....]

20

- 21 'e' šur [GIGIR šá] ULÙ 2' KÙŠ 23 GU₄-UD 'ina NIM' [...]
 22 'x' [x x GU₄]-'UD' ina NIM' ina TIL MAŠ-MAŠ' ŠÚ NU' PAP' in [...]
 23 'x' [...] 'x' DU₆' in 4' [G]U₄-UD ina 'x' [...]
 24 in' [x x x GE₆] 10' ina ZÁLAG GU₄-UD e 'MÚL' [...] [...]
 25 'x' [x x x] 'x x x x x x x x' [...]
 26 'x' [x x x] 'x x x x x x x x' [...]
 27 [...] 'x x DIR-ŠE 7' GU₄-UD 'ina NIM ina x x x' [...]
 28 [...] GU₄-UD SIG MÚL-MÚL' 2 'x' K[ÙŠ' [...]

29 [...] DIR-ŠE 29 GENNA ana ME E-a

- 30 [MU-1-me-16-KAM¹]An u 'An A-šú LUGAL^{meš} BAR' GE₆ [...]
 31 [...] GENNA ana ŠÚ ki UŠ-a 1½ KÙŠ ár 'RÍN šá' [ULÙ [...]
 32 [...] n]a GENNA in 23 GENNA ina S[AG GÍR-TAB ŠÚ [...]
 33 [...] IG]I GAN GE₆ 1 ina ZÁLAG GENNA e MÚL e šá SAG [GÍR-TAB [...]
 34 [...] ár MÚ]L e šá SAG UŠ

35 [...] 'DU₆' 8 AN [...]

'Rev.

I

- 1' [ŠE x ŠÚ] na
 2' [x ME] GE₆
 3' [...] (blank)
 4' [...] x]+6 GE₆
 5' [...] AN]-KU₁₀ šámaš
 6' [...] DIB
 7' [...] ana ŠÚ šámaš
 8' [...] AN]-KU₁₀
 9' [...] ULÙ
 10' [...] 'x' ME'
 11' and 12' (broken)
 13' [...] AN-K]U₁₀' sin
 14' [...] 'x' ana ŠÚ šámaš
 15' [GE₆ x A]N-KU₁₀ šámaš
 16' [...] x]+23 GE₆ ana ZÁLAG
 17' [ŠE x x] 3 ME 'muš'
 18' [sin AN-KU₁₀] Á ULÙ
 19' [u KUR ki]-i TAB-ú
 20' 'ina' 10[+x G]E₆ 10 SI GAR-an
 21' in 4 UŠ GE₆ GIN
 22' GE₆ 29 AN-KU₁₀ šámaš
 23' šá DIB in 1.28
 24' GE₆ ana ZÁLAG

- 21 2' cubits above ζ Tauri. The 23rd, Mercury's [...] in the east [...]
 22 [...] Mercury's last appearance in the east' in the end of Gemini; I did not' watch'.
 Around [...]
 23 [...] [...] Month VII', around the 4th', Mercury's [...] in [...] [...]
 24 Around' [...] Night] of the 10th, last part of the night, Mercury was [...] above [...]
 25 [...] [...] [...]
 26 [...] [...] [...]
 27 [...] [...] Month XII₂, the 7th, Mercury's [...] in the east in [...] [...]
 28 [...] Mercury was 2 [...] cubits' below η Tauri.

29 [...] Month XII₂, the 29th, Saturn's acronychal rising.

- 30 [Year 116,] kings Antiochus and his son Antiochus. Month I', night [...]
 31 [...] when Saturn became stationary to the west, [it became stationary] 1½ cubits behind
 α Librae [...]
 32 [...] sunset to setting of Saturn: [...] Around the 23rd, Saturn's [last appearance] in the
 be[ginning of Scorpius [...]
 33 [...] first appearance [...] Month IX, night of the 1st, last part of the night, Saturn was
 [...] above β Scorpil [...] [...]
 34 [...] it became stationary [...] behind] β Scorpil.

35 [...] Month VII, the 8th, Mars' [...]

'Rev.

I

- 1' [Month XII, 'moonset to sunrise' plus] 'sunrise to moonset': [...]
 2' ['moonrise to sunset' plus] 'sunset to moonrise': [...]
 3' [...]
 4' [...] x]+6° of night
 5' [...] solar eclipse
 6' [...] omitted.
 7' [...] before sunset.
 8' [...] ec]lipse
 9' [...] south
 10' [...] [...]
 11' and 12' (broken)
 13' [...] lunar ec]lipse,
 14' [...] [...] before sunset
 15' [Night of the xth,] solar eclipse
 16' [...] x]+23° before sunrise
 17' [Month XII, [...] moonrise to sunset: 3°, measured;
 18' [lunar eclipse:] when
 19' it began on the south [and east] side,
 20' in 10+[x]° of night it made 10 fingers.
 21' At 4° after sunset.
 22' Night of the 29th, solar eclipse
 23' which was omitted. At 88°
 24' before sunrise.

II

- 1 [...] 'x' [...]
 2 [DIR-ŠE x] 'x' KUR₄ ¹muš ina GUB IGI²
 3 [1]4 ŠÚ na NU TUK muš
 4 [1]5 ME GE₆ ²NU¹ TUK² muš
 5 [1]5 8 na a-kam muš
 6 16 15 GE₆ DIR muš
 7 27 9,10 KUR ki PAP NU IGI
 8 [MU]-'1-me¹-57-KAM
 9 'De-met-ri LUGAL
 10 BAR 30 16 KUR₄ muš ana šámaš SIG
 11 14 6,40 ŠÚ DIR NU PAP
 12 15 7,50 ME DIR NU PAP
 13 15 1,20 na DIR NU PAP
 14 16 10,30¹GE₆ 'DIR¹ NU PAP
 15 27 14 KUR muš
 16 GU₄ 1 23 KUR₄ a-pir muš
 17 ina GUB IGI ana šámaš NIM
 18 14 11 ME DIR muš
 19 14 4,30+[x] ŠÚ DIR muš
 20 15 5 GE₆ DIR [x]
 21 15 6 na 'DIR muš¹
 22 27 15 KUR a-kam muš
 23 SIG 30 13 ma-diš a-kam muš
 24 14 14 ME a-kam muš
 25 14 10 ŠÚ ŠÚ
 26 15 4 GE₆
 27 15 5,30+[x] na a-'kam muš¹
 28 28 14² KUR [a]-kam muš
 29 ŠU 1 18 'KUR₄ ¹a-pir² muš
 30 ana šámaš NIM
 31 13 15,40 ME muš
 32 13² 14,30 ME^{sic}
 33 1[4] '15² GE₆ a-k[am muš]
 34 [14] 'x¹ na a-'kam muš¹
 35 [x x],40 KUR DIR NU PAP

III

- 1' 10+[x]
 2' 11+[x]
 3' 14 '6² 'na¹ [...] [...]
 4' 27 18 KUR [...]

II

- 1 [...] [...]
 2 [Month XII₂,] it was bright², measured; it could be seen while (the sun) stood there.
 3 [The 1]4th, there was no 'moonset to sunrise' and 'sunrise to moonset'; measured.
 4 [The 1]5th, there was no² 'moonrise to sunset' and 'sunset to moonrise'²; measured.
 5 [The 1]5th, sunrise to moonset: 8°; measured (despite) mist.
 6 The 16th, sunset to moonrise: 15°, measured (despite) clouds.
 7 The 27th, moonrise to sunrise: 9° 10'; when I watched I did not see it.
 8 [Year] 157,
 9 king Demetrius.
 10 Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 16°; it was bright, measured; it was low to the sun.
 11 The 14th, moonset to sunrise: 6° 40'; clouds, I did not watch.
 12 The 15th, moonrise to sunset: 7° 50'; clouds, I did not watch.
 13 The 15th, sunrise to moonset: 1° 20'; clouds, I did not watch.
 14 The 16th, sunset to moonrise: 10° 30'²; clouds, I did not watch.
 15 The 27th, moonrise to sunrise: 14°, measured.
 16 Month II, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 23°; it was bright, earthshine, measured;
 17 it could be seen while (the sun) stood there; it was high to the sun.
 18 The 14th, moonrise to sunset: 11°; measured (despite) clouds.
 19 The 14th, moonset to sunrise: 4° 30+[x']; measured (despite) clouds.
 20 The 15th, sunset to moonrise: 5°; [...] clouds.
 21 The 15th, sunrise to moonset: 6°; measured (despite) clouds.
 22 The 27th, moonrise to sunrise: 15°; measured (despite) mist.
 23 Month III, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13°; measured (despite) much mist.
 24 The 14th, moonrise to sunset: 14°; measured (despite) mist.
 25 The 14th, moonset to sunrise: 10°; overcast².
 26 The 15th, sunset to moonrise: 4°.
 27 The 15th, sunrise to moonset: 5° 30+[x']; measured (despite) mist.
 28 The 28th, moonrise to sunrise: 14°²; measured (despite) mist.
 29 Month IV, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 18°; it was bright², earthshine², measured;
 30 it was high to the sun.
 31 The 13th, moonrise to sunset: 15° 40', measured.
 32 The 13th, moonrise to sunset (error for: moonset to sunrise): 14° 30'.
 33 The 1[4th.] sunset to moonrise: 15°²; [measured] (despite) mist.
 34 [The 14th.] sunrise to moonset:; measured (despite) mist.
 35 [The xth.] moonrise to sunrise: [x°] 40'; clouds, I did not watch.

III

- 1' The 10+[xth,]
 2' The 11+[xth,]
 3' The 14th, sunrise to moonset²: 6°² [...]
 4' The 27th, moonrise to sunrise: 18° [...]

5'	KIN 1	15	KUR ₄	a-[pir ²]
6'	muš ina	GUB IGI	ana šámaš	N[IM ¹]
7'	12	5,50	ŠÚ	[....]
8'	13	ME	u GE ₆	NU TUK 'x' [....]
9'	13	9	na m[uš]	
10'	14	7,30	GE ₆	a-kam m[uš]
11'	27	9	KUR	a-kam muš
12'	DU ₆	30	10 UŠ	ma-diš SIG
13'			ma-diš	a-kam muš
14'	12	3 ²	ŠÚ	
15'	13	9 ²	ME	a-kam muš
16'	13	2	na a-[kam m]	uš
17'	14	2 ²	GE ₆	a-kam muš
18'	[2]7	22 ²	KUR	'x' [mu]š ²
19'	APIN 1	'15'	KUR ₄	'DIR ² ' [....]
20'			ana šámaš	NIM
21'	12	6,20	ŠÚ	DIR ² [....]
22'	13	7,20	ME	[....]
23'	13	8,30	na 'x'	[....]
24'	14	2	GE ₆	mu[š]
25'	27	14	KUR	m[uš]
(space)				
Colophon:				
26'	U ₄ -1-KAM ^m	[eš]	
27'	šá ana	M[U]	

Comments

- Obv. 1: 'first appearance' restored from computation.
 3: the date IX 11 agrees more or less with the computed time for stationary point in the west.
 5: the observation on I 11 concerned η Piscium.
 13: First appearance of Venus in the west is expected for VI 3 according to computation.
 29: this line refers to SE 115 to keep track of intercalary months; year 116, which precedes the goal year by Saturn's period of 59 years, appears in the next section.
 35: the date VII 8 fits a last appearance of Mars in SE 96.
 Rev.
 I 5'-7': solar eclipse in month XII₂ of year SE 156 (= -154 April 15).
 I 8'ff.: lunar eclipse of -154 May 1.
 I 13'f.: lunar eclipse of -154 Sep 24..
 I 15'f.: solar eclipse of -154 Oct 10.
 I 17'-21': lunar eclipse in month XII (= -153 March 21). A report of this eclipse was published in Vol. V, No. 63. See also Huber and De Meis, p. 133
 I 22'-24': solar eclipse of -153 Apr 5.

5'	Month VI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	15°; it was bright, ear[thshine ²],
6'	measured; it could be seen while (the sun) stood there; it was high ² to the sun.	
7'	The 12th, moonset to sunrise: 5° 50' [....]	
8'	The 13th, there was no 'moonrise to sunset' and 'sunset to moonrise' [....]	
9'	The 13th, sunrise to moonset: 9°, measured.	
10'	The 14th, sunset to moonrise: 7° 30'; measured (despite) mist.	
11'	The 27th, moonrise to sunrise: 9°; measured (despite) mist.	
12'	Month VII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:)	10°; it was very faint;
13'	measured (despite) much mist.	
14'	The 12th, moonset to sunrise: 3°.	
15'	The 13th, moonrise to sunset: 9°; measured (despite) mist.	
16'	The 13th, sunrise to moonset: 2°; measured (despite) mist.	
17'	The 14th, sunset to moonrise: 2°; measured (despite) mist.	
18'	[The 2]7th, moonrise to sunrise: 22°; measured	
19'	Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:)	15°; it was bright ² ; clouds ² [....]
20'	it was high to the sun.	
21'	The 12th, moonset to sunrise: 6° 20'; clouds ² [....]	
22'	The 13th, moonrise to sunset: 7° 20' [....]	
23'	The 13th, sunrise to moonset: 8° 30' [....]	
24'	The 14th, sunset to moonrise: 2°, measured.	
25'	The 27th, moonrise to sunrise: 14°, measured.	

Colophon

- 26' First days, [....]
 27' which [were established] for year [....]

No. 55

BM 45881 (= 81-7-6, 312)

Listed as LBA T *1271

Photo: Pl. 39

Goal year: SE 175

'Obv.'

1' [....] [....]

2' [.... MÚL-BA]BBAR SIG MÚL *ár šá* S[AG HUN]N 5 KÙŠ3' [....] SIG MÚL 'IGI' *šá* SAG HUN 3½ KÙŠ4' [.... M]ÚL-BABBAR SIG MÚL *ár šá* SAG HUN 5 KÙŠ5' [.... BAR] GE₆ 24 *ina* ZÁLAG *dele-bat*6' [....] GE₆ 18 *ina* ZÁLAG *dele-[bat]*7' [.... *šur* GIGIR] *šá* SI 3 KÙŠ8' [.... x]+1 *na-su i[n x I]*GI9' [.... MÚL x *šá* SUHUR] MÁŠ 1 SI 'x' [x(x)] *ana* ŠÚ LAL10' [.... US]AN *dele-bat*

11' [....] 27 USAN'

12' [....] *ana* NIM DIB

'Rev.'

1' [x x] ŠÚ *muš*2' [x x] ME DIR *muš*3' [x x] *na* DIR *muš*4' [x x]+1 GE₆ DIR NU PAP5' '27' 14 KUR *muš*6' [B]AR 1 26 *na-su ma-diš*7' KUR₄ *a-pir muš <ina>* GUB IGI

(space)

8' [....] *šá ana* MU-1-me-11-KAM *šá* [š*i-i*]9' [MU-1-me-1,1]5-KAM 'Ar-[š*á-ka-a* LUGAL *kun-nu-u*]

Comments

Obv. 9': in BM 33472 (same Goal Year) too, Venus observations in the west begin only in Capricorn, almost 3 months after first appearance. Venus did come rather close to both γ and δ Capricorni. After 1 SI, one expects *dele-bat* [nn mm] *ana* ŠÚ LAL 'Venus being back to the west', but the traces do not look like *dele-bat*.

No. 55

'Obv.'

1' [....] [....]

2' [Year 92,] Jupiter was 5 cubits below α Arietis.3' [....] 3½ cubits below β Arietis.4' [....] Jupiter was 5 cubits below α Arietis.

5' [Year 167, Month I,] night of the 24th, last part of the night, Venus was

6' [η Piscium] Night of the 18th, last part of the night, Venus was7' [.... η Tauri] 3 cubits [below] β [Tauri.]

8' [....] sunset to setting of Venus: [x]+1°; (ideal) first appearance on [the xth.]

9' [....] 1 finger [.... γ/δ] Capricorni, Venus' being [....] back to the west.

10' [....] first part of the night, Venus was

11' [.... Night of the] 27th, first part of the night,

12' [....] having passed [....] to the east.

'Rev.'

1' [....] moonset to sunrise: [....]; measured¹.

2' [....] moonrise to sunset: [....]; measured (despite) clouds.

3' [....] sunrise to moonset: [....]; measured (despite) clouds.

4' [....] sunset to moonrise: [x]+1°; clouds, I did not watch.

5' The 27th¹, moonrise to sunrise: 14°; measured.

6' Month I, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 26°; it was very

7' bright, earthshine, measured; it could be seen while (the sun) stood there. (space)

8' [....] which [were established] for year 111, which [is]

9' [year 17]5, [king] Ar[saces.]

No. 56

BM 47928 (= 81-11-3, 635)

Photo: Pl. 39

Goal year: SE 177

Upper edge

1 [... *li*]š-*lim*

Obv.:

1 [... MÚL-BABBAR] *ina* MAŠ-MAŠ ŠÚ SIG 9 MÚL-BABBAR *ina* 'MAŠ-MAŠ IGI'2 [... nn] KÙŠ *ár* MAŠ-MAŠ *ár* UŠ NU PAP3 [... nn KÙ]Š *ina* IGI MAŠ-MAŠ IGI UŠ4 [... SI] 3 KÙŠ ŠU GE₆ 6 *ina* ZÁLAG MÚL-BABBAR5 [... *e* MAŠ-MAŠ] šá SIPA 3½ KÙŠ KIN GE₆ 276 [... MÚ]L-BABBAR *ana* ŠÚ *ina* LAL-šú SIG MAŠ-MAŠ IGI 3½ KÙŠ KIN DIR

7 [... 'x x' [x x] 'x x x x x KÙŠ'

Date

The date can be established as follows: on III 9 of a year, Jupiter had a first appearance in Gemini; twelve years earlier, Jupiter was in Gemini as well; and this year had an intercalary Ululu. Only SE 106 and 94 fulfill these conditions, so that the Goal year is SE 177.

No. 57

BM 35036 (= Sp II 564) (+) 35334 + 35696 (= Sp II 908 + Sp III 214)

Copies: LBAF 1272 (35036), 1298 (35696), 1345 (35334)

Photo: Pl. 39f.

Goal-year: SE 181

The fragments certainly are from the same tablet; distribution of lines:

BM 35036: Obv. 1-18, rev. IV, colophon;

BM 35334+: Obv. 18-35, rev. II and III.

Obv.:

1 [MU-1-me-10-KAM *ina*] 'IGI' SA₄ š[á ABSIN]2 [... ŠÚ 'DU₆' 29 MÚL-BABBAR *ina* RÍN IGI3 [... *k*]i 'UŠ-ú' 2½ KÙŠ *ina* IGI MÚL 'e'

4 [šá SAG GÍR-TAB UŠ] (blank)

5 [MU-1,38-KAM MÚL-BABBAR *e*] SA₄ šá [ABSI]N '1½' KÙŠ'

6 [... MÚ]L-BABBAR SIG 'RÍN šá' SI 3 KÙŠ

7 [... KA']

8 [MU-1-me-1,13-KAM 'Ar-šá-k]a-a 'LUGAL BAR GE₆ 18¹⁷ *ina* ZÁLAG *dele-bat* SIG MÚL KUR

No. 56

Upper edge

1 [...] may it go well.

Obv.:

1 [... Jupiter's] last appearance in Gemini. Month III, the 9th, Jupiter's first appearance in Gemini.

2 [...] it became stationary [nn] cubits behind β Geminorum; I did not watch.

3 [...] it became stationary [nn] cubits in front of α Geminorum.

4 [...] 3 cubits [...] Month IV, night of the 6th, last part of the night, Jupiter was

5 [...] 3½ cubits [above γ] Geminorum. Month VI, night of the 27th,

6 [...] Jupiter, while moving back to the west, was 3½ cubits below α Geminorum. Month VI was intercalary.

7 [...] [...] cubits.

No. 57

Obv.:

1 [Year 110 Jupiter became stationary in] front of α Vir[ginis].

2 [... Jupiter's] last appearance [...] Month VII, the 29th, Jupiter's first appearance in Libra.

3 [... when Jupiter] became stationary [to the east, it became stationary] 2½ cubits in front of β

4 [Scorpii.]

5 [Year 98 Jupiter was] 1½ cubits [above] α Virginis.

6 [...] Jupiter was 3 cubits below β Librae.

7 [...]

8 [Year 173,] king [Arsa]ces. Month I, night of the 18th, last part of the night, Venus was [...] below η

- 9 [ša DUR nu-nu nn mm *dele-bat* SIG MÚL IGI šá SAG 𐎶UN 4 'KÙŠ GU₄' GE₆ [x]
'ina ZÁLAG' *dele-bat* SIG MÚL ár šá SAG 𐎶UN 5 KÙŠ
- 10 [.... GE₆] 29² [ina ZÁ]LAG *dele-bat* [e is le₁₀ 1 KÙŠ] 6 SI SIG GE₆ 10 ina ZÁLAG *dele-bat*
- 11 [....] 'šur GIGIR šá ULÛ' 4 SI *dele-bat* 4 U ana NIM DIB GE₆ 20 ina ZÁLAG *dele-bat*
- 12 [....] 'x' GE₆ 22 ina ZÁLAG *dele-bat* SIG MÚL ár šá še-pít MAŠ-MAŠ 4 SI
- 13 [.... ŠU] GE₆ 5 ina ZÁLAG *dele-bat* SIG MAŠ-MAŠ IGI 4 KÙŠ GE₆ 9 ina ZÁLAG *dele-bat*
- 14 [SIG MAŠ-MAŠ ár nn mm MÚL ár šá ALLA šá] ULÛ 2 SI *dele-bat* 2 U ana ŠÚ LAL GE₆ 30 ina ZÁLAG *dele-bat*
- 15 [SIG SAG A nn mm] 'x' GE₆ 15 ina ZÁLAG *dele-bat* 'e' [MÚL T]UR šá 4 KÙŠ ár LUG[AL nn] 'U'
- 16 [.... *dele-bat* SIG GIŠ.KUN A nn] KÙŠ *dele-bat* 4 SI ana NIM DIB KIN [G]E₆ 1 ina ZÁLAG *dele-bat*
- 17 [e GÌR ár šá A nn mm] *dele-bat* SIG DELE šá IGI ABSIN 2/3 KÙ[Š] 'dele-bat' 6 U ana NIM DIB
- 18 [....] 'x' [....] 'x x x' [x x] 'x x' x x
- 19 [....] 'x' šá IGI 'x x' KÙŠ *dele-bat* [....] 'x x'
- 20 [.... *dele-bat* ina] ŠÚ ina GU IGI TUR 9 na-s[u]
- 21 [.... SIG MÚL ár šá] SAG 𐎶UN 5 KÙŠ GE₆ 10+[x]
- 22 [....] (blank)
-
- 23 [MU-1-me-35-KAM šur] 'GIGIR šá x x' 1/2 KÙŠ GE₆ [....]
- 24 [....] 'KÙŠ' GE₆ 17 USAN GU₄-UD e MÚL [ár šá še-pít MAŠ-MAŠ nn mm]
- 25 [....] 'ina ŠÚ' ina MAŠ-MAŠ ŠÚ NU PAP SIG 9 GU₄-UD ina NIM ina MAŠ-MAŠ [IGI]
- 26 [....] ina ALLA ŠÚ IZI in 7 GU₄-UD ina ŠÚ ina ABSIN IGI [....]
- 27 [....] KIN 22 GU₄-UD ina NIM ina TIL ABSIN 1 1/2 KÙŠ 'e' [SA₄ šá ABSIN]
- 28 [.... GU₄-UD] ina ŠÚ ina TIL PA IGI GAN 27 GU₄-UD ina Š[Ú ... ŠÚ]
- 29 [.... TA x š]á GAN ki PAP NU IGI 12 GU₄-UD [ina N]IM ina G[U IGI]
- 30 [....] 24 GU₄-UD 'ina NIM' ina SAG 'zi^{ime} ŠÚ DIR NU PAP 'x' [....]
- 31 [....] 'x x ŠE' GE₆ 26 USAN GU₄-UD SIG MÚL-MÚL 2 KÙ[Š]
-
- 32 [.... x]+17 GENNA ana NIM ki UŠ-ú 1 KÙŠ ina IGI SI MÁŠ 2 KÙŠ ana U[LÛ SIG UŠ]
- 33 [....] 2 1/2 KÙŠ ina IGI SI MÁŠ 2 KÙŠ ana ULÛ SIG UŠ GAN in [....]
- 34 [....] 'x' [x] 'KÙŠ' ana ULÛ SIG SIG GU₄-UD 1 KÙŠ ana UL[Û SIG]
-
- 35 [....] 'x' [....]

- 9 [Piscium Venus was] 4 cubits [below β Arie]tis. Month II², night [of the xth.] last part of the night, Venus was 5 cubits below α Arieits.
- 10 [.... Night] of the 29th², last part of the night, Venus was [1 cubit] 6 fingers [above α Tauri.] Month III, night of the 10th, last part of the night, Venus was
- 11 [....] 4 fingers [....] ζ Tauri, Venus having passed 4 fingers to the east. Night of the 20th, last part of the night, Venus was
- 12 [....] Night of the 22nd, last part of the night, Venus was 4 fingers below μ Geminorum.
- 13 [.... Month IV.] night of the 5th, last part of the night, Venus was 4 cubits below α Geminorum. Night of the 9th, last part of the night, Venus was
- 14 [.... below β Geminorum] 2 fingers [.... δ Can]cri, Venus being 2 fingers back to the west. Night of the 30th, last part of the night, Venus was
- 15 [.... below ε Leonis] Night of the 15th, last part of the night, Venus was [nn] fingers above ρ Leonis.
- 16 [.... Venus was nn] cubits [below θ Leonis.] Venus having passed 4 fingers to the east. Month VI, night of the 1st, last part of the night, Venus was
- 17 [.... above β Virginis] Venus was 2/3 cubit below γ Virginis, Venus having passed 6 fingers to the east.
- 18 [....] [....] [....]
- 19 [....] cubits, Venus [....]
- 20 [.... Venus'] first appearance in the west in Aquarius; it was small, sunset to setting of Venus: 9° [....]
- 21 [....] 5 cubits [below α] Arietis. Night of the 10+[xth,]
- 22 [....]
-
- 23 [Year 135] 1/2 cubit [.... β/ζ] Tauri. Night [....]
- 24 [....] cubits. Night of the 17th, first part of the night, Mercury was [....] above [μ Geminorum]
- 25 [.... Mercury's] last appearance in the west in Gemini; I did not watch. Month III, the 9th, Mercury's [first appearance] in the east in Gemini [....]
- 26 [.... Mercury's] last appearance [in the east] in Cancer. Month V, around the 7th, Mercury's first appearance in the west in Virgo [....]
- 27 [....] Month VI, the 22nd, Mercury's [first appearance] in the east in the end of Virgo, 1 1/2 cubits above [α Virginis]
- 28 [.... Mercury's] first appearance in the west in the end of Sagittarius. Month IX, the 27th, Mercury's [last appearance] in the we[st]
- 29 [.... from the xth] of month IX, when I watched I did not see it. The 12th, Mercury's [first appearance in] the east in Aqua[rius]
- 30 [....] the 24th, Mercury's last appearance in the east in the beginning of Pisces; clouds, I did not watch [....]
- 31 [....] Month XII², night of the the 26th, first part of the night, Mercury was 2 cubits below η Tauri [....]
-
- 32 [.... the x]+17th, when Saturn became stationary to the east, [it became stationary] 1 cubit in front of β Capricorni, 2 cubits low to the south [....]
- 33 [....] it became stationary 2 1/2 cubits in front of β Capricorni, 2 cubits low to the south. Month IX, around [....]
- 34 [....] [....] cubits low to the south, 1 cubit below Mercury to the south [....]
-
- 35 [....] [....]

Rev.

I broken;

II

- 1' [... *mu*]š
 2' [...] *muš*
 3' [SIG x x] *na-su a-kam*
 4' [...] 'x' <*ana*> *šamáš* SIG
 5' [x x] ME NU PAP
 6' [x x] ŠÚ
 7' [x x],30 GE₆
 8' [x] 13 *na a-kam muš*
 9' [x] [1]7,20 KUR
 10' [Š]U 1 16 *na-su* KUR₄ *a-pir*
 11' [*mu*]š *ina* GUB IGI *ana šamáš* SIG
 12' [x] 6 ŠÚ NU PAP
 13' [x x]+5 ME D[IR' x]
 14' [...] 'x' [...]

III

- 1' DU₆ 30 [...]
 2' *muš ma-diš* 'ana'¹ [...]
 3' 13 6,30 Š[Ú] [...]
 4' 14 8,20 ME DI[R] [...]
 5' 14 6 *na a-kam muš*
 6' 15 30 NINDA GE₆
 7' 27 16,30 K[UR] [...]
 8' APIN 30 [...]
 9' *ana*² [...]

IV

- 1' 'x x x x' DIR *muš*
 2' 27 14 KUR DIR *muš*
 3' 'ŠE' 30 11,20 DIR NU PAP
 4' 14 11 ŠÚ DIR *muš*
 5' 15 6 ME DIR *muš*
 6' 15 40 NINDA *na* DIR NU PAP
 7' 16 10 UŠ GE₆ DIR *muš*
 8' 28 11,30 KUR NU PAP
 9' BAR 1 16 *na-su* DIR *muš*
 10' *ana šamáš* NIM

Colophon

- 1 [... AN-K]U₁₀^{meš} *ša a-na* MU-1-me-17-KAM
 2 [*ša ši-i* MU-1-me-1,21-KAM 'Ar]-*ša-ka-a* LUGAL *kun-nu-u'*

Rev.

I broken;

II

- 1' [..., measured.
 2' [...,] measured.
 3' [Month III, ...] sunset to moonset: [...]; mist,
 4' [...] it was low to the sun.
 5' [The xth,] moonrise to sunset: [...]; I did not watch.
 6' [The xth,] moonset to sunrise: [...]
 7' [The xth,] sunset to moonrise: [x°]30'.
 8' [The xth,] sunrise to moonset: 13°; measured (despite) mist.
 9' [The xth,] moonrise to sunrise: 17° 20'.
 10' Month IV, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 16°; it was bright, earthshine,
 11' [meas]ured. It could be seen while (the sun) stood there; it was low to the sun.
 12' [The xth,] moonset to sunrise: 6°; I did not watch.
 13' [The xth,] moonrise to sunset: [x]+5°; cl[ouds' ...]
 14' [...] ... [...]

III

- 1' Month VII, (the 1st of which was identical with) the 30th (of the preceding month,) [sunset to moonset: ...]
 2' measured; it was much ... [...]
 3' The 13th, moonset to sunrise: 6° 30'.
 4' The 14th, moonrise to sunset: 8° 20'; cl[ouds, ...]
 5' The 14th, sunrise to moonset: 6°; measured (despite) mist.
 6' The 15th, sunset to moonrise: 30'.
 7' The 27th, moonrise [to sunrise:] 16° 30'.
 8' Month VIII, (the 1st of which was identical with) the 30th (of the preceding month,) [sunset to moonset: ...]
 9' to² [...]

IV

- 1' [...; measured (despite) clouds.
 2' The 27th, moonrise to sunrise: 14°; measured (despite) clouds.
 3' Month XII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 11° 20'; clouds, I did not watch.
 4' The 14th, moonset to sunrise: 11°; measured (despite) clouds.
 5' The 15th, moonrise to sunset: 6°; measured (despite) clouds.
 6' The 15th, sunrise to moonset: 40'; clouds, I did not watch.
 7' The 16th, sunset to moonrise: 10°; measured (despite) clouds.
 8' The 28th, moonrise to sunrise: 11° 30'; I did not watch.
 9' Month I, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 16°; measured (despite) clouds.
 10' It was high to the sun.

Colophon

- 1 [... eclipses, which are established for year 117,
 2 [which is year 181,] king Arsaces.

No. 58

BM 34867 (= Sp II 373)

Copy: LBA 1273

Goal year: SE 182

Upper edge

1 [ina a-mat dEN u dGAŠAN-ia liš]-'lim'

Obv.

1 [MU-1-me-11-KAM] ¹An u ¹An A-šú LUGAL SIG 'x x' [...]

2 [... ina GÍR]-TAB ŠÚ APIN 13 MÚL-BABBAR 'ina' [...]

3 [... KIR₄ šil PA UŠ4 [MU-1.39-KAM] ¹An LUGAL GU₄ GE₆ 11' USAN [...]5 [... RÍN šá] ULÙ 6 U IZI GE₆ 30 USAN [...]6 [... ina ZÁLAG MÚL-BABBAR e MÚL KUR šá KIR₄ šil PA nn mm]7 [MU-1-me]-10-KAM šá ší-i MU-1-me-1,14-KAM ¹Ar-šá-k[a-a LUGAL]8 [... e š]ur GIGIR šá ULÙ 1 KÙŠ GE₆ 17 USAN dele-bat e [...]9 [... GE₆] '2'2 USAN dele-bat e MAŠ-MAŠ šá SIPA 4 KÙŠ GU₄ G[E₆]10 [... GE₆] 18 USAN dele-bat e MÚL ár šá ALLA šá ULÙ 1 [KÙŠ]11 [... e] LUGAL 2/3 KÙŠ dele-bat 4 U ana NIM DIB GE₆ 13 U[SAN]12 [... SIG GI]Š.KUN A 4½ KÙŠ ŠU GE₆ 2 USAN dele-bat [...]13 [... IZI G]E₆ 1 USAN dele-bat SIG SA₄ šá ABSIN 4 U dele-b[at]14 [... ár SA₄ šá ABSIN 1 KÙŠ ana ULÙ SIG IGI 'x' [...]15 [... 'x' GE₆ 24 ina ZÁLAG dele-bat e RÍN šá ULÙ 1 KÙ[Š]16 [... dele]-bat e MÚL KUR šá KIR₄ šil PA 2/3 KÙŠ ZÍZ [...]

17 [... e MÚL ár šá SUHUR MÁŠ 1 KÙŠ [...]

18 [MU-1-me-36-KAM] ¹Se LUGAL BAR GE₆ 4 USAN G[U₄-UD]

Comments

3: this stationary point is in the west.

No. 58

Upper edge

1 [At the command of Bel and Beltija may it go] well.

Obv.

1 [Year 111,] king [Antiochus and] his son Antiochus. Month III, [...]

2 [... Jupiter's] last appearance [in Scor]pius. Month VIII, the 13th, Jupiter's [first appearance] in [...]

3 [...] became stationary [...] θ Ophiuchi.

4 [Year 99,] king Antiochus. Month II, night of the 11th², first part of the night, [...]

5 [...] 6 fingers [...] α [Librae.] Month V, night of the 30th, first part of the night, [...]

6 [...] last part of the night, Jupiter was [...] above θ Ophiuchi.

7 [Year 1]10, which is year 174, [king] Arsaces. [...]

8 [...] 1 cubit [above] ζ Tauri. Night of the 17th, first part of the night, Venus was [...] above [η Geminorum]

9 [... Night] of the 22nd, first part of the night, Venus was 4 cubits above γ Geminorum. Month II, night [...]

10 [... Night] of the 18th, first part of the night, Venus was 1 [cubit] above δ Cancri [...]

11 [...] 2/3 cubit [above] α Leonis, Venus having passed 4 fingers to the east. Night of the 13th, first [part of the night,]

12 [...] 4½ cubits [below] θ Leonis. Month IV, night of the 2nd, first part of the night, Venus was [...]

13 [... Month V, ni]ght of the 1st, first part of the night, Venus was 4 fingers below α Virginis, Venus [...]

14 [...] first appearance [in the east in Virgo, [...] behind α Virginis, 1 cubit low to the south [...]

15 [...] Night of the 24th, last part of the night, Venus was 1 cubit above α Librae [...]

16 [...] Venus was 2/3 cubit above θ Ophiuchi. Month XI. [...]

17 [...] 1 cubit above δ Capricorni [...]

18 [Year 136,] king Seleucus. Month I, night of the 4th, first part of the night, Me[rcury was]

No. 59

BM 46163 (= 81-7-6, 624)

Listed as LBAT *1274

Photo: Pl. 40

Goal year: SE 183

Flake

1' (traces)

2' SIG MÚL-MÚL 6 'U' [...]

3' MU-1-me-37-KAM ¹[Se LUGAL]4' in 22 GU₄-UD ina [NIM UD-DA IGI DIB]5' GU₄-UD ina NIM UD-DA [ŠÚ-šú DIB]6' [KUR¹] NIM-a 16 n[a-su ina ŠÚ]7' [ina] 'ABSIN² ŠÚ' KIN 'x' [...]

Comments

3'ff.: the sequence of phenomena can be restored from computation.

No. 60

BM 34292 + 34388 (Sp 403 + 507) (+) 34359 (Sp 476)

Copies: LBAT 1275 (34292), 1276 (34388), 1316 (34359)

Photo: Pl. 40

Goal year: SE 184

Upper edge

1 [ina a]-mat ^dEN u ^d[GAŠAN-ia liš-lim]

Obv.:

1 [M]U-1-me-13-KAM ¹An 'u' [¹An A-šú LUGAL^{meš}]

2 MÚL-BABBAR ana ŠÚ ki UŠ-a ina TIL 'PA' [...]'x' [... GAN]

3 in 12 MÚL-BABBAR ina MÁŠ ŠÚ AB 'x' [...]'x x x x' [...]

4 MU-1,41-KAM ¹An LUGAL GAN GE₆ [... SIG] SI MÁŠ 2 KÙŠ ZÍZ GE₆ 25 [ina ZÁLAG MÚL-BABBAR¹]

5 e MÚL IGI šá SUḪUR MÁŠ ½ [KÙŠ x (x) M]ÚL-BABBAR e MÚL ár šá SUḪUR MÁŠ ½ KÙŠ

6 MU-1-me-12-KAM šá ší-i MU-1-m[e-1,16-KAM ¹Ar-šá-k]a-a LUGAL BAR 17 12 na dele-bat

7 in 22 dele-bat ina ŠÚ ina MÚL-MÚL [ŠÚ M]ÚL-MÚL IGI KUR 9 na-su in 1 IGI

8 [SIG G]E₆ 1 ina ZÁLAG dele-bat 'e x' [... dele-ba]t SIG šur GIGIR šá SI 4 KÙŠ GE₆ 22+[x]9 [... M]ÚL IGI šá še-pít MÁŠ-MÁŠ 1 KÙŠ GE₆ [...]

No. 59

Flake

1' (traces)

2' 6 fingers below η Tauri [...]

3' Year 137, [king Seleucus]

4' Around the 22nd, Mercury's [first appearance] in [the east ... omitted.]

5' Mercury's [last appearance] in the east, ... [omitted]

6' [it was bright²] (and) high, sunset to setting of Mercury: 16° [...]

7' last appearance [in the west in] Virgo. Month VI, ... [...]

No. 60

Upper edge

1 [At] the command of Bel and [Beltija may it go well.]

Obv.:

1 Year 113, [kings] Antiochus and [his son Antiochus]

2 when Jupiter became stationary to the west, [it became stationary] in the end of 'Sagittarius' [... Month IX,]

3 around the 12th, Jupiter's last appearance in Capricorn. Month X, the xth, [...] ... [...]

4 Year 101, king Antiochus. Month IX, night [...] 2 cubits [below] β Capricorni. Month XI, night of the 25th, [last part of the night, Jupiter was]

5 ½ cubit above γ Capricorni. [...] Jupiter was ½ cubit above δ Capricorni.

6 Year 112, which is year 1[76,] king Arsaces. Month I, the 17th, sunset to setting of Venus: 12°.

7 Around the 22nd, Venus' [last appearance] in the west in Taurus [...] Venus' first appearance [in the east in] Taurus; it was bright, rising of Venus to sunrise: 9°; (ideal) first appearance on the 1st.

8 [Month III, ni]ght of the 1st, last part of the night, Venus was [...] above [...] Venu]s was 4 cubits below β Tauri. Night of the 22+[xth,]

9 [...] Venus was] 1 cubit [below] η Geminorum. Night [...]

- 10 [...] 'x¹ [...] *dele-bat e* MAŠ-MAŠ] šá SIPA 2 KÙŠ *dele-bat* 4 [...]
 11 [...] 'x x¹ GE₆ 7¹ [*ina* ZÁLAG *dele-bat* SIG] MAŠ-MAŠ ár 3½ KÙŠ 'x¹ [...]
 12 [...] *dele-bat* SIG MAŠ]-'MAŠ¹ IGI 4½¹ [KÙŠ [...] 'x x¹ [...]
 13 [MÚL ár šá ALLA šá U]LÛ² ½ KÙŠ *dele-bat* 2 U *ana* [...]
 14 [...] *dele-bat* 2 U *ana* NIM DIB² KIN² x [...]
 15 [SIG GIŠ.]'KUN¹ A '5² KÙŠ¹ GE₆ 17 *ina* ZÁLAG *dele-bat* [...]
 16 SIG DELE šá IGI ABSIN 2/3 K[ÛŠ] '*dele-bat* 4¹ U *ana* ŠÚ LAL [...]
 17 GE₆ 27 *ina* ZÁLAG *dele-bat e* RÍN šá ULÛ 2/3 K[ÛŠ [...]
 18 GE₆ 12 *ina* ZÁLAG *dele-bat e* MÚL *e* šá SAG G[ÍR-TAB nn mm [...]
 19 GE₆ 27 *ina* ZÁLAG *dele-bat e* MÚL KUR šá KIR₄ [šil PA [...]
 20 ŠE 28 *dele-bat ina* ŠÚ *ina* HUN IGI 7² 'na¹ [...]

- 21 MU-1-me-38-KAM 'An u 'An A-šú [LUGAL^{mes} [...]
 22 [x x x] ŠÚ-šú DIB SIG [x] 'GU₄-UD¹ [...]
 23 [...] 'x x x¹ [...]

'Rev.

I

- 1' GE₆ [...]
 2' AN-K[U₁₀ [...]
 3' 1,27² [x [...]

No. 61

BM 34969 + 35467 (= Sp II 492 + 1058)

Copies: LBA 1335 (34969), 1344 (35467)

Photo: Pl. 41

Goal year: SE 185

'Obv.

- 1' [...] 'x¹ [...]
 2' [MU-1-me-2-KAM 'An] LUGAL KIN 'GE₆¹ [x x x x x] 'x x¹ [...]
 3' [...] x]+'15¹ USAN [M]ÚL-BABBAR [...]
 4' [MU-1-me-13]-KAM šá ší-i MU-1-me-1, '17¹-[KAM 'Ar-šá-ka-a LUGAL [...]
 5' [...] U]SAN *dele-bat* SIG MAŠ-MAŠ ár 3 [KÙŠ [...]
 6' [...] U]SAN *dele-bat* SIG SAG A 3½ K[ÛŠ [...]
 7' [...] USAN *dele-bat e* MÚL TUR šá 4 K[ÛŠ ár LUGAL nn mm [...]
 8' [...] USAN *dele-bat* SIG GIŠ.KUN 'A¹ [nn mm] 'x x¹ [...]
 9' [...] USAN *dele-bat* SIG DELE šá I[GI ABSIN] '1¹ KÙŠ 'x¹ [...]
 10' [...] USAN *dele-bat* SIG 'RÍN¹ [šá] ULÛ 2/3 KÙŠ KIN [...]
 11' [...] 'USAN¹ *dele-bat* 'SIG¹ [MÚL] MURUB₄ šá SAG GÍR-TAB 10 SI 'x¹ [...]
 12' [...] MÚL KUR šá KIR₄ šil PA [...]

- 10 [...] [.... Venus was] 2 cubits [above] γ Geminorum, Venus being 4 [fingers]
 11 [...] Night of the 7th², [last part of the night, Venus was] 3½ cubits [below] β Geminorum [...]
 12 [.... Venus was] 4½ cubits [below] α Geminorum [...] [...]
 13 [.... Venus was] ½ cubit [below δ² Can]cri², Venus being 2 fingers to [...] [...]
 14 [...] Venus having passed 2 fingers to the east. Month VI, [...]
 15 5¹ cubits [below θ] Leonis. Night of the 17th, last part of the night, Venus was [...]
 16 2/3 cubit below γ Virginis, Venus being 4 fingers back to the west [...]
 17 Night of the 27th, last part of the night, Venus was 2/3 cubit above α Librae [...]
 18 Night of the 12th, last part of the night, Venus was [...] above β Scorp² [...]
 19 Night of the 27th, last part of the night, Venus was [...] above θ Ophiuchi [...]
 20 Month XII, the 28th, Venus first appearance in the west in Aries; sunset to setting of Venus: 7°² [...]

- 21 Year 138, [kings] Antiochus and his son Antiochus. [...]
 22 [...] its last appearance omitted. Month III, [the xth,] Mercury's [...]
 23 [...] [...]

'Rev.

I

- 1' Night [...]
 2' eclipse [...]
 3' 87°² [...]

No. 61

'Obv.

- 1' [...] [...]
 2' [Year 102,] king [Antiochus.] Month VI, night² of [...] [...]
 3' [...] the 15+xth, first part of the night, Jupiter was [...]
 4' [Year 113,] which is year 17[7, king Arsaces]
 5' [...] first part of the night, Venus was 3 [cubits] below β Geminorum. [...]
 6' [...] first part of the night, Venus was 3½ cubits below ε Leonis. [...]
 7' [...] first part of the night, Venus was [...] above ρ Leon[is] [...]
 8' [...] first part of the night, Venus was [...] below θ Leonis [...]
 9' [...] first part of the night, Venus was 1 cubit below γ Virginis [...]
 10' [...] first part of the night, Venus was 2/3 cubit below α Librae. Month VI, [...]
 11' [...] first part of the night, Venus was 10 fingers below δ Scorp² [...]
 12' [...] θ Ophiuchi [...]

- 13' [...] 'x KUR NIM¹-a 8² 'na²1 [...] ...
 14' [...] *dele-bat e* MÚL 'x¹ [...] ...
 15' [MU-1-me-38-KAM] ¹An u ¹A[n ...]
 16' [MU-1-me-39-KAM] ¹An u ¹[An ...]
 17' [...] G]U₄-UD SIG¹ [...] 'x¹ [...] ...
 18' [...] 'x x¹ [...] SIG LUGAL 1 [KÙŠ ...]
 19' [...] *ina* ABS]IN IGI KUR '15¹ *na-su in* [x IGI ...]
 20' [...] 'x¹ *ki* PAP NU IGI DU₆ 17 GU₄-UD [...] ...
 21' [...] 'x x¹ [x x x] KÙŠ¹ API[N x] GU₄-UD *ina* NIM *ina* GÍR-TAB 1 KÙŠ *ár* MÚL 'e¹ [šá
 SAG GÍR-TAB ...]
 22' [...] 'na¹-su in 13 IGI GAN GE₆ 1 *ina* ZÁLAG GU₄-UD e SI₄ 3 KÙŠ 'x¹ [...] ...
 23' [...] 'x¹ 1² KÙŠ 29 ŠÚ šá GU₄-UD *ina* NIM *ina* PA TA 26 *ki* PAP NU IG[I ...]
 24' [...] 'x¹ *na-su in* 27 GU₄-UD *ina* ŠÚ *ina* zib^{me} ŠÚ NU PAP ŠE 20 GU₄-UD [*ina* NIM ...]
 25' [...] 'x IGI KUR¹ 16 *na-su in* 17 IGI ...
 26' [MU-1-me-26-KAM ... GU₄ (x)] 27 GENNA *ana* NIM *ki-i* UŠ-ú *ina* TIL GU 4 KÙŠ *ár*
 M[ÚL-BABBAR ...]
 27' [...] GENNA *ana* ME E-a DU₆ EN 21 GENNA *ana* ŠÚ *ki-i* [i U]Š-[a ...]
 28' [...] 'x ŠE¹ 30 GENNA *ina* SAG zib^{me} ½² KÙŠ 'ina IGI² MÚL x¹ [...] IGI ...]
 29' [...] 'in EN 26+x² AN *ana* NIM *ki-i* 'UŠ¹-ú ...]

'Rev.'

I

- 1'-3' [...] 'x¹
 4' [...] ME¹ NIM²
 5' [...] x]+1 ME NU PAP
 6' [...] 'x¹ 6 SI
 7' [...] ŠÚ-im
 8' [...] 'x x IGI²
 9' [...] 'ME¹ *ana* ŠÚ 'šamáš¹
 10' [...] x]+20 ME DIR NU [PAP]
 11' [...] '5¹ ITU BAR DIB
 12' [*in* x]+1 GE₆ GIN
 13' [...] 'x x x¹

- 13' [...]; it was bright (and) high, rising of [Venus to sunrise:] 8°² [...]
 14' [...] Venus was [...] above ... [...]
 15' [Year 138, kings] Antiochus and [his son] Anti[ochus ...]
 16' [Year 139, kings] Antiochus and [his son] Antiochus ...]
 17' [...] Mer]cury was [...] below [...] ... [...]
 18' [...] ... 1 [cubit] below α Leonis [...]
 19' [...] first appearance [in Vir]go; it was bright, rising of Mercury to sunrise: 15°; [(ideal)
 first appearance] on [the xth ...]
 20' [...] ... when I watched I did not see it. Month VII, the 17th, Mercury's [...]
 21' [...] ... cubits. Month [VIII, the xth,] Mercury's [first appearance] in the east in
 Scorpius, 1 cubit behind β [Scorpii ...]
 22' [...] rising of Mercury to sunrise: [...]; (ideal) first appearance on the 13th. Month IX,
 night of the 1st, last part of the night, Mercury was 3 cubits above α Scorpii ... [...]
 23' [...] ... 1 cubit. The 29th, Mercury's last appearance in the east in Sagittarius: from the
 26th, when I watched I did not see it. [...]
 24' [...] sunset to setting of Mercury: Around the 27th, Mercury's last appearance in the
 west in Pisces; I did not watch. Month XII, the 20th, Mercury's ...
 25' first appearance [in the east ...]; it was bright, rising of Mercury to sunrise: 16°; (ideal)
 first appearance on the 17th.
 26' [Year 126, ... Month II,] the 27th, when Saturn became stationary to the east, [it became
 stationary] in the end of Aquarius, 4 cubits behind J[upiter ...]
 27' [...] Saturn's acronychal rising. Month VII, until the 21st, when Saturn became stationary
 to the west, [...]
 28' [...] ... Month XII, the 30th, Saturn's [first appearance] in the beginning of Pisces, ½²
 cubit in front² of ... [...]
 29' [...] around until the 26+xth, when Mars became stationary to the east, [...]

'Rev.'

I

- 1'-3' [...] ...
 4' [...] after sunrise²
 5' [...] moonrise to sunset: [x]+1°; I did not watch.
 6' [...] ... 6 fingers
 7' [...] was covered.
 8' [...] ... was seen².
 9' [...] before sunset².
 10' [...] moonrise to sunset: [x°] 20'; clouds, I did not watch.
 11' [...] (after) 5 months, BAR, omitted.
 12' [At x]+1° after sunset.
 13' [...] ...

II

- 1' GU₄ 30 10+[x]
 2' 'x' [...]
 3' 14 2 'ŠÚ²¹
 4' 15 2², 30² [ME]
 5' 15 [x na]
 6' 16 [x GE₆]
 7' 27 'x' [...]
 8' S[IG x x x] 'x' a-kam [...]
 9' 1[4 x ŠÚ] muš
 10' 1[5 x] ME² muš
 11' 1[5 x] na mu[š]
 12' '16' [x] 'GE₆ x'
 13' [...]
 14' Š[U] '1' 12+[x]
 15' 14 1 [ŠÚ]
 16' 15 1+[x ME]
 17' 15 'x' [na]
 18' 16 8 GE₆
 19' '27²¹ 10+[x]

Colophon

- 1 U₄-1-KAM I[GI-DU₄-A^{meš}....]
 2 šá ana 'MU-1'-m[e-1,25-KAM 'Ar-šá-ka-a LUGAL kun-nu-u]

Comments

Obv. 28: There is no Normal star near Saturn at this date; Jupiter (MÚL-BABBAR) is about 6° to the east.

Rev. I 5'-9': lunar eclipse of -144 Oct 3. The moon rose eclipsed; the eclipse magnitude reached 0.49, see Huber and De Meis, p. 200.

I 10'-12': lunar eclipse of -143 Feb 28.

II

- 1' Month II, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 10+[x°]
 2' [...]
 3' The 14th, moonset to sunrise: 2°.
 4' The 15th, [moonrise to sunset:] 2°² 30+[x']
 5' The 15th, [sunrise to moonset:]
 6' The 16th, [sunset to moonrise:]
 7' The 27th, [moonrise to sunrise:]
 8' Month I[II,] mist [...]
 9' The 1[4th, moonset to sunrise:]; measured.
 10' The 1[5th,] moonrise to sunset: [...]; measured.
 11' The 1[5th,] sunrise to moonset: [...]; measured.
 12' The 16th, sunset to moonrise: [...]
 13' [...]
 14' Month I[V], the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 12+[x°]
 15' The 14th, [moonset to sunrise:] 1° [...]
 16' The 15th, [moonrise to sunset:] 1+[x°]
 17' The 15th, [sunrise to moonset:] [...]
 18' The 16th, sunset to moonrise: 8°
 19' The 27th², [moonrise to sunrise:] 10+[x°]

Colophon

- 1 First days, ap[pearances,]
 2 which [were established] for year 1[85, king Arsaces.]

Date

The date can be found by the following considerations: Saturn in G(oal) Y(ear) -59 was in Aquarius; the Mercury section shows that in GY-46 there were two kings, the older one by the name of Antiochus; the Venus section has a date in both Arsacid and Seleucid era, so that GY-8 must be within the Parthian period already. From these conditions the Goal year can be found to be SE 185.

No. 62

BM 34658 + 35787 (= Sp II 141+157 + III 313) (+) BM 35341 (= Sp II 915)

Copies: LBA 1277 (34658), 1278 (35787), 1279 (35341)

Photo:

Goal year: SE 186

Upper edge

1 [ina amat] ^dEN u ^dGAŠAN-ia [liš]-lim

Obv.:

1 [MU-1-me-15-KAM ¹A]n u ¹An A-šú LUGAL^{meš} ¹ŠU¹ in EN 4 M[ÚL-BABBAR] ¹x¹
DUR SIM-MAḪ U[Š]
2 [....] APIN EN 7 MÚL-BABBAR ana ŠÚ ki UŠ-a ina zib^{me}? [UŠ] ¹ŠE¹ in 20 MÚL-
BABBAR ina SAG ḪUN [ŠÚ]
3 [.... MÚ]L-BABBAR ina ḪUN IGI KUR 15 na-su in 10+[x IGI]

4 [MU-1-me-3]-KAM ¹An u An A-šú LUGAL^{meš} DIB-q[a] ia-a-nu

5 [MU-1-me-1], 18-KAM ¹Ar-šá-ka-a LUGAL GU₄ GE₆ 5 [ina ZÁLAG dele-bat SIG MÚL
KUR šá DU]R nu-nu 4 KÙŠ

6 [GE₆ x] ina ZÁLAG dele-bat SIG MÚL I[GI šá SAG ḪUN x]+¹½ KÙŠ¹ GE₆ 15 ina ZÁLAG
dele-bat SIG MÚL ár šá SAG [ḪUN] 6 K[ÚŠ SIG GE₆ x ina ZÁLAG dele-bat] SIG MÚL-
MÚL 2 KÙŠ

7 GE₆ 12 ina ZÁLAG dele-bat e is le₁₀ [nn mm GE₆] 22 ¹ina ZÁLAG¹ dele-bat SIG šur GIGIR
šá SI 2½ KÙŠ GE₆ 20+[x ina ZÁLAG dele-bat e] šur GIGIR šá UL¹ ½ KÙŠ

8 ŠU GE₆ 6¹ ina ZÁLAG dele-bat e MÚL IGI šá [še-pít MAŠ-MA]Š 8 ¹SI¹ [GE₆] ¹6+x¹ ina
ZÁLAG dele-bat e MÚL ár šá še-pít MAŠ-MAŠ 8 [SI GE₆] 9 ina ZÁLAG dele-bat e MAŠ-
MAŠ šá [SIPA nn mm]

9 GE₆ 17 ina ZÁLAG dele-bat SIG MAŠ-MAŠ IGI [nn mm GE₆ x ina ZÁLAG dele-bat SIG
MAŠ-MAŠ] ¹ár¹ 3 KÙŠ KIN 9 9 na dele-b[at x] dele-bat ina NIM ina ¹ABSIN¹ [ŠÚ]

10 APIN 26+[x dele-bat] ina ŠÚ ina SAG [PA IGI] ŠE GE₆ 3 USAN dele-bat SIG [MÚL
KUR šá DUR nu-nu nn mm]

11 GE₆ ¹11¹ U[ŠAN] ¹dele-bat SIG MÚL IGI¹ [šá SAG ḪUN nn mm] GE₆ 13 USAN dele-bat
SIG MÚL ár šá SA[G ḪUN]

12 [....] ¹x¹ [.... e i]s le₁₀ 3 KÙŠ GE₆ 19 USAN [dele-bat SIG šur GIGIR šá SI nn mm]

13 [GE₆ x U]SAN dele-bat [....] ¹x x¹ [x] ¹x¹ [x] MU-1-me-1, 19-KAM [BAR GE₆ x]+1 ¹USAN¹
[....]

14 [MU-1-me-40-KAM ¹An u ¹An A-šú LUGAL^{meš} BAR 1]6 GU₄-UD ina NIM ina ḪUN ŠÚ
NU PAP GU₄ ¹17¹ GU₄-UD ina ŠÚ ina MAŠ-MAŠ IGI KUR [....]

No. 62

Upper edge

1 [At the command] of Bel and Beltija may it go well.

Obv.:

1 [Year 115,] kings Antiochus and his son Antiochus. Month IV, around until the 4th, [when]
Jupiter [became stationary to the east,] it became stationary [....] of the band of the
Fishes.

2 [....] Month VIII, until the 7th, when Jupiter became stationary to the west, [it became
stationary] in Pisces [....] Month XII, around the 20th, Jupiter's [last appearance] in the
beginning of Aries.

3 [....] Jupiter's first appearance in Aries; it was bright, rising of Jupiter to sunrise: 15°;
[(ideal) first appearance] on the 10+[xth]

4 [Year 103,] kings Antiochus and his son Antiochus. The passings [....] were missing.

5 [Year 1]78, king Arsaces. Month II, night of the 5th, [last part of the night, Venus was]
4 cubits [below η] Piscium.

6 [Night of the xth,] last part of the night, Venus was [x]+½ cubits below β [Arietis.]
Night of the 15th, last part of the night, Venus was 6 cubits below α Arietis. [Month III,
night of the xth, last part of the night, Venus was] 2 cubits below η Tauri.

7 Night of the 12th, last part of the night, Venus was [....] above α Tauri. [Night] of the
22nd, last part of the night, Venus was 2½ cubits below β Tauri. Night of the 20+[xth,
last part of the night, Venus was] ½ cubit [above] ζ Tauri.

8 Month IV, night of the 6th¹, last part of the night, Venus was 8 fingers above η
Gemi[nor]um. [Night] of the 6+xth, last part of the night, Venus was 8 [fingers] above μ
Geminorum. [.... Night of the] 9th, last part of the night, Venus was [....] above γ
Geminorum.

9 Night of the 17th, last part of the night, Venus was [....] below α Geminorum. [Night of
the xth, last part of the night, Venus was] 3 cubits [below] β [Geminorum. Month VI, the
9th, rising of Venus to sunrise: 9°. [The xth,] Venus' [last appearance] in the east in
Virgo.

10 Month VIII, the 26+[xth,] Venus' [first appearance] in the west in the beginning [of
Sagittarius] Month XII, night of the 3rd, first part of the night, Venus was [....]
below [η] Piscium.]

11 Night of the 11th, [first part of the night,] Venus was [....] below β Arietis. Night of the
13th, first part of the night, Venus was [....] below α Arietis....]

12 [....] [....] 3 cubits [above] α Tauri. Night of the 19th, first part of the night, [Venus
was below β Tauri.]

13 [Night of the xth, first] part of the night, Venus was [....] Year 179, [month I, night of
the x]+1st, first part of the night, [....]

14 [Year 140, kings Antiochus and his son Antiochus. Month I, the 1]6th, Mercury's last
appearance in the east in Aries; I did not watch. Month II, the 17th¹, Mercury's first
appearance in the west in Gemini; it was bright, [....]

- 15 [... x]+1 USAN GU₄-UD SIG 'MAŠ¹-MAŠ *ár* 2½ KÙŠ GE₆ 16 USAN [...]
 16 [... ŠÚ šá GU₄-UD] 'ina ALLA¹ TA 28¹ šá SIG *ki* PAP NU IGI 26 GU₄-UD *ina* NIM
ina [x IGI]
 17 [...] 17 GU₄-UD *ina* NIM *ina* SAG A ŠÚ DU₆ 9 GU₄-[UD]
 18 [...] *ina* NIM] *ina* RÍN IGI KUR 14 *na-su in* 8 IGI GE₆ 17 [...]
 19 [...] 'GAN¹ GE₆ 5 *ina* ZÁLAG GU₄-UD *e* SI₄ 3½ KÙŠ [...]
 20 [...] *in* x]+5 IGI ZÍZ 18 GU₄-UD *ina* ŠÚ *ina* TIL MÁ[Š ŠÚ]
 21 [...] NU IGI
-
- 22 [MU-I-me-27-KAM¹Se LUGAL GENNA *ana* NIM *ki* U]Š-ú *ina* zib^{me} UŠ IZI 15
 [GENNA *ana* ME E-a]
 23 [...] K]UR NIM-a 17¹ *na-s[u*]

'Rev.

I

- 1' GE₆ 28 AN-K[U₁₀] 'šamáš¹
 2' šá DIB *in* 39 GE₆ *ana* ZÁLAG
 3' ZÍZ GE₆ 13 3 ME *muš*
 4' 5 UŠ *ár* RIT GIB(error for GÀM) *ziq*-[pī¹
 5' *sin* AN-KU₁₀ Á ULÙ *u* KUR
 6' *ki* TAB-ú *ina* 20 GE₆ 9 SI
 7' GAR-*an* 5 GE₆ ÍR
 8' *in* 7 UŠ GE₆ GIN
 9' 28 AN-KU₁₀ šamáš¹
 10' *ki* PAP NU IGI

II

- 1' '15 x¹ [...]
 2' 16 12 GE₆ [mu]š
 3' 27 10 UŠ[KUR] *muš*
 4' SIG 30 12+[x x x] NU IGI
 5' 14 5+[x] 'ŠÚ¹ *muš*
 6' 15 10+[x] ME *muš*
 7' 15 2+[x na] *muš*
 8' 16 [x G]E₆ *muš*
 9' 27 [x KU]R *ki* PAP NU IGI
 10' Š[U x x] *na-su* KUR₄ *a-pir* *muš*
 11' *ina* GUB IGI *ana* šamáš¹ SIG
 12' [x] 1,30 ŠÚ
 13' [x] 2 ME *muš*

- 15 [... night of the x]+1st, first part of the night, Mercury was 2½ cubits below β
 Geminorum. Night of the 16th, first part of the night, [...]
 16 [... Mercury's] last appearance [in the west] in Cancer: from the 28th of month III, when
 I watched I did not see it. The 26th, Mercury's [first appearance] in the east in [...]
 17 [...] The 17th, Mercury's last appearance in the east in the beginning of Leo. Month VII,
 the 9th, Mercury's [...]
 18 [...] first appearance [in the east] in Libra; it was bright, rising of Mercury to sunrise:
 14°; (ideal) first appearance on the 8th. Night of the 17th, [...]
 19 [...] Month IX, night of the 5th, last part of the night, Mercury was 3½ cubits above α
 Scorpii. [...]
 20 [...] (ideal) first appearance [on the x]+5th. Month XI, the 18th, Mercury's [last
 appearance] in the west in the end of Capricorn
 21 [...] I did not see it.
-
- 22 [Year 127, king Seleucus when Saturn] became stationary [to the east,] it became
 stationary in Pisces. Month V, the 15th, [Saturn's acronychal rising.]
 23 [...] it was bright (and) high, rising of Saturn to sunrise: 17°¹ [...]

'Rev.

I

- 1' Night of the 28th, solar eclipse,
 2' which was omitted. At 39° before sunrise.
 3' Month XI, night of the 13th, moonrise to sunset: 3°, measured.
 4' When (the point) 5° behind β Aurigae culminated,
 5' lunar eclipse; when it began on the south and east side,
 6' in 20° of night it made 9 fingers.
 7' 5° of night maximal phase.
 8' At 7° after sunset.
 9' The 28th, solar eclipse;
 10' when I watched I did not see it.

II

- 1' The 15th, [...]
 2' The 16th, sunset to moonrise: 12°; [measu]red.
 3' The 27th, [moonrise to sunrise:] 10°; measured.
 4' Month III, (the 1st of which was identical with) the 30th (of the preceding month,
 sunset to moonset:) 12+[x°] I did not see it.
 5' The 14th, moonset to sunrise: 5+[x°;] measured.
 6' The 15th, moonrise to sunset: 10+[x°;] measured.
 7' The 15th, [sunrise to moonset:] 2+[x°;] measured.
 8' The 16th, sunset to moonrise: [x]; measured.
 9' The 27th, [moonrise] to sunrise: [x]; when I watched I did not see it.
 10' Month IV, [...] sunset to moonset: [...]; it was bright, earthshine, measured;
 11' it could be seen while (the sun) stood there; it was low to the sun.
 12' [The xth,] moonset to sunrise: 1° 30'.
 13' [The xth,] moonrise to sunset: 2°; measured.

- 14' [x] 12 na muš
 15' [x] 11 GE₆ muš
 16' [20]+x13 KUR muš

III

- 1' [...] 'x'
 2' [...] 'x x'
 3' [DU₆] x KUR₄ a-pir
 4' [...] ana šámaš SIG
 5' 12² [x ME] muš
 6' 13² 5+[x ŠÚ] muš
 7' 'x' 1? G[E₆ mu]š
 8' 'x' '8¹¹ na 'muš'
 9' 27 17 KUR muš
 10' APIN 1 15, '10' DIR NU PAP
 11' 12 14,40 ŠÚ DIR NU [PAP]
 12' 13 4,30 ME DI[R x]
 13' 13 1,20 na D[IR x]
 14' 14 8 GE₆ [x x]
 15' 27 10+[x KUR x x]

IV

- 1' 20+[x]
 2'-8' (traces)
 (break)
 1" [...] 24 na-su a-kam m[uš]
 (blank)

Colophon

- 1 U₄-1-KAM [...] ù AN-KU₁₀ meš
 2 šá a-[na MU-1-me-22-KAM šá] šá-i MU-1-me-1,26-KAM
 3 ¹[Ar-šá-ka-a LUGAL] kun-nu-u'

Comments

Rev. I 1'f.: Solar eclipse of -143 Sep 8.

3'ff.: Lunar eclipse of -142 Feb 17.

9'f.: Solar eclipse of -142 Mar 5.

III 5f.: Restoration of the intervals is uncertain; if 'na' is the last interval, the others have to be in the order ME - ŠÚ - GE₆.

- 14' [The xth,] sunrise to moonset: 12°; measured.
 15' [The xth,] sunset to moonrise: 11°; measured.
 16' [The 20]+xth, moonrise to sunrise: 13°; measured.

III

- 1' [...]
 2' [...]
 3' [Month VII,]; it was bright, earthshine
 4' [...] it was low to the sun.
 5' The 12th², [moonrise to sunset:] measured.
 6' The 13th², [moonset to sunrise:] 5+[x°;] measured.
 7' The xth, sunset to [moonrise:] 1°²; measured.
 8' The xth, sunrise to moonset: 8°²; measured.
 9' The 27th, moonrise to sunrise: 17°; measured.
 10' Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 15° 10'; clouds, I did not watch.
 11' The 12th, moonset to sunrise: 14° 40'; clouds, I did not [watch.]
 12' The 13th, moonrise to sunset: 4° 30'; clou[ds,]
 13' The 13th, sunrise to moonset: 1° 20'; cl[ouds,]
 14' The 14th, sunset to moonrise: 8°; [...]
 15' The 27th, [moonrise to sunrise:] 10+[x°]

IV

- 1' The 20+[xth,]
 2'-8' (traces)
 (break)
 1" [...] sunset to moonset: 24°; measured (despite) mist.
 (blank)

Colophon

- 1 First days, [...] and eclipses
 2 which were established for [year 122, which] is year 186,
 3 [king Arsaces.]

No. 63

BM 34646 + 35026 (= Sp II 129+441+553)

BM 34411 (Sp 530)

Both pieces are part of the same tablet.

Copies: LBAT 1280 (34646), 1281 (35026), 1322 (34411)

Photo: Pl. 43

Goal year: SE 187

Obv.:

- 1 [MU-1-me-16-KAM ¹An u ¹An A-šú LUGAL^{meš} ŠU in EN 26 MÚL-BABBAR ana NIM
ki UŠ-ú 2½ KÙŠ
- 2 [... ana ULÙ SJIG UŠ KIN in 27 MÚL-BABBAR ana ME E-a APIN EN 26 MÚL-
BABBAR ana ŠÚ ki UŠ-a
- 3 [... 'x' UŠ
-
- 4 [MU-1-me-4-KAM ¹An u ¹An] A-šú LUGAL^{meš} BAR GE₆ 23 ina ZÁLAG MÚL-BABBAR
SIG MÚL IGI šá SAG ĦUN 4 KÙŠ
- 5 [... S]IG MÚL ár šá SAG ĦUN 5 KÙŠ APIN GE₆ 4 USAN MÚL-BABBAR ana ŠÚ ina
LAL-šú SIG MÚL ár
- 6 [šá SAG ĦUN nn mm AB GE₆] 10 USAN MÚL-BABBAR ana NIM ina LAL-šú SIG
MÚL ár šá SAG ĦUN 4 KÙŠ
- 7 [MU-1-me-15-KAM šá ší-i MU-1-me-1,19]-'KAM' ¹Ar-šá-ka-a LUGAL BAR GE₆ 4 USAN
dele-bat e MAŠ-[MAŠ šá SIPA]
- 8 [... 'USAN' dele-bat SIG MAŠ-MAŠ ár 2 KÙŠ GU₄ GE₆ 6 USA[N dele-bat]
- 9 [... 2/3 KÙŠ SIG 28 8 na dele-bat
- 10 [... ár GU₄-U]D' ana NIM 2 KÙŠ ana ULÙ SIG IGI 9 n[a-s]u
- 11 [... dele-bat SIG LUGAL 1 KÙŠ 4 SI
- 12 [... dele-b]at SIG GIŠ.KUN A 5½ KÙŠ dele-bat 5 SI ana NIM DIB
- 13 [... SIG DELE šá IGI ABS]IN ½ KÙŠ dele-bat 2 U ana NIM DIB
- 14 [... APIN GE₆] 15 ina ZÁLAG dele-bat e RÍN šá ULÙ ¹½²¹ [KÙŠ]
- 15 [... e MÚL e šá SA]G GÍR-TAB 4 U dele-bat 4 U ana EG[IR¹]
- 16 [... x]+1 KÙŠ AB GE₆ 22 ina ZÁLAG dele-b[at]
- 17 [... (blank)
- 18 [... KUR NIM-a 16 na-s[u]
- 19 [... USA]N GU₄-UD e šur GIGIR š[á ULÙ nn mm]
- 20 [... GU₄-U]D e MÚL ár šá še-pít M[AŠ-MAŠ nn mm]
- 21 [... SIG MAŠ-MAŠ IGI 4 K[ÙŠ]
- 22 [... G]U₄-UD ina ŠÚ ina TIL [MAŠ-MAŠ ŠÚ]
- 23 [... GE₆ x]+1 ina ZÁLAG GU₄-U[D]
- 24 [... 'x' [...]

BM 34411:

- 1' [... SIG MÚL KUR šá DU]R nu-nu 2½ KÙŠ GE₆ 12' [x ']
- 2' [... ŠU GE₆ 18 ina ZÁLAG AN SIG MÚL-MÚL 2 KÙŠ
- 3' [... is l]e₁₀¹ 2½ KÙŠ GE₆ 23 ina ZÁLAG AN
- 4' [... e šur GIGIR] šá ULÙ 2/3 KÙŠ APIN GE₆ 9 ina ZÁLAG 'AN'

No. 63

Obv.:

- 1 [Year 116,] kings [Antiochus and] his son Antiochus. Month IV, around until the 26th,
when Jupiter became stationary to the east, it became stationary 2½ cubits
- 2 [... low [to the south.] Month VI, around the 27th, Jupiter's acronychal rising. Month
VIII, until the 26th, when Jupiter became stationary to the west,
- 3 it became stationary [...]
-
- 4 [Year 104,] kings [Antiochus and] his son [Antiochus.] Month I, night of the 23rd, last
part of the night, Jupiter was 4 cubits below β Arietis.
- 5 [... 5 cubits below α Arietis. Month VIII, night of the 4th, first part of the night, Jupiter,
while moving back to the west, was [...] below α
- 6 [Arietis. Month X, night] of the 10th, first part of the night, Jupiter, while moving back
to the east, was 4 cubits below α Arietis.
- 7 [Year 115, which is year 179,] king Arsaces. Month I, night of the 4th, first part of the
night, Venus was [...] above γ [Geminorum.]
- 8 [...] first part of the night, Venus was 2 cubits below β Geminorum. Month II, night of
the 6th, first part of the [night, Venus was]
- 9 [...] 2/3 cubits [...] Month III, the 28th, sunset to setting of Venus: 8°.
- 10 [...] first appearance [in the east behind Mercur]y¹ to the east, 2 cubits low to the
south; rising of Venus to sunrise: 9°;
- 11 [...] Venus was 1 cubit 4 fingers below α Leonis.
- 12 [...] Venus was 5½ cubits below θ Leonis, Venus having passed 5 fingers to the east.
- 13 [...] Venus was] ½ cubit [below γ] Virginis, Venus having passed 2 fingers to the east.
- 14 [...] Month VIII, night] of the 15th, last part of the night, Venus was ½² [cubit] above α
Librae.
- 15 [...] 4 fingers [above β] Scorpii, Venus being 4 fingers to the back² [...]
- 16 [...] x]+1 cubit [...] Month X, night of the 22nd, last part of the night, Venus was [...]
- 17 [...] (blank)
- 18 [Year 141,] it was bright (and) high, sunset to setting of Mercury: 16°; [...]
- 19 [..., first part of the night, Mercury was [...] above [ζ] Tauri.
- 20 [...] Mercury was [...] above μ Geminorum.
- 21 [...] 4 cubits below α Geminorum.
- 22 [...] Mercury's [last appearance] in the west in the end of [Gemini.]
- 23 [...] night of the x]+1st, last part of the night, Mercury was [...]
- 24 [...] [...]

BM 34411:

- 1' [... Mars was] 2½ cubits [below η] Piscium. Night of the 12th,
- 2' [...] Month IV, night of the 18th, last part of the night, Mars was 2 cubits below η Tauri.
- 3' [...] 2½ cubits [above α] Tauri. Night of the 23rd, last part of the night, Mars was
- 4' [...] 2/3 cubit [above] ζ [Tauri.] Month VIII, night of the 9th, last part of the night,
Mars was

- 5' [... G]UB' GE₆ 15 USAN AN *ana* NIM *ina* LAL-šú
 6' [... x]+1 USAN AN *e šur* GIGIR šá ULÙ
 7' [... ŠE 1]r5¹ USAN AN *e MÚL ár* [šá *še-pit* MAŠ-MAŠ]

Lower edge

- 1 [... DIR]-ŠE GE₆ 13 USAN AN [...]

'Rev. (of 34646)

I and II broken;

III

- 1' [... 'x'
 2' [...] DIR *muš*
 3' [...] K]UR *muš*
 4' [...] x]+11 *na-su*
 5' [...] a]-*kam muš*
 6' [14 10] UŠ ME *a-kam muš*
 7' [14] 9 ŠÚ
 8' [1]5 30 NINDA GE₆ DIR NU PAP
 9' [1]5 5 *na* DIR *muš*
 10' [2]8 15 KUR *a-kam muš*

IV

- 1' 13 [...]
 2' 14 [...]
 3' 27 [x]+20 [...]
 4' ŠE '30 x' [...]
 5' 13 '5¹ Š[Ú]
 6' 14 1+[x] ME x [...]
 7' 14 12¹, 20+[x] *na* [...]
 8' 15 '16¹ GE₆
 9' 27 '17¹ KUR
 10' BAR 1 20 *na-su*
 11' KUR₄ *a-pir m[u]š ana šamāš* SIG

Colophon

- 1 [...] DIB^{meš} u AN-KU₁₀ ^{meš} šá *ana* MU-1-me-23-KAM
 2 [šá ší-i M]U-1-me-1,27-KAM 'Ar-šá-ka-a 'LUGAL'
 3 *kun-nu-'u'*

Comments

Obv. 4: *ina* ZÁLAG is to be inserted from above.

13: γ Virginis is to be preferred over α Virginis because the distance between Venus and α at passing was much greater than ½ cubit.

5': the first preserved sign could be AB, i.e. month X, but there was no conjunction on X 15.

Computation offers passing β Tauri on XI 15.

6': probably to be restored as XI 21.

- 5' [...] Night of the 15th, first part of the night, Mars, while moving back to the east.
 6' [...] night of the x]+1st, first part of the night, Mars was [...] above ζ Tauri.
 7' [...] Month XII, night of the 1]5th', first part of the night, Mars was [...] above μ Ge[minorum.]

Lower edge

- 1 [...] Month XII₂', night of the 13th, first part of the night, Mars was [...]

'Rev.

I and II broken:

III

- 1' [...]
 2' [...] measured (despite) clouds.
 3' [...] moonrise to sunrise: [...], measured.
 4' [...] sunset to moonset: [x]+11°;
 5' [...] measured (despite) mist.
 6' [The 14th.] moonrise to sunset: [10]°; measured (despite) mist.
 7' [The 14th.] moonset to sunrise: 9°.
 8' [The 1]5th. sunset to moonrise: 30'; clouds, I did not watch.
 9' [The 1]5th. sunrise to moonset: 5°; measured (despite) clouds.
 10' [The 2]8th. moonrise to sunrise: 15°; measured (despite) mist.

IV

- 1' The 13th, [...]
 2' The 14th, [...]
 3' The 27th, [moonrise to sunrise: x]+20' [...]
 4' Month XII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]
 5' The 13th, moonset to sunrise: 5°² [...]
 6' The 14th, moonrise to sunset: 1+[x°] [...]
 7' The 14th, sunrise to moonset: 12°² 20+[x']
 8' The 15th, sunset to moonrise: 16°².
 9' The 27th, moonrise to sunrise: 17°².
 10' Month I, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 20°;
 11' it was bright, earthshine, measured; it was low¹ to the sun.

Colophon

- 1 [...] passings and eclipses which were established for year 123.
 2 [which is] year 187, king Arsaces.

No. 64

BM 35342 (= Sp II 916)

Copy: LBAT 1282

Goal Year: SE 188

'Obv.'

- 1' [...] 'x x x x' [...]
 2' [...] GU₄-UD ina ŠÚ ina] ABSIN IGI 14 na-s[u [...]
 3' [...] G]U₄-UD ina NIM ina ABSIN 1 KÙ[Š ina IGI GENNA IGI [...]
 4' [...] ina] ZÁLAG GU₄-UD e S[A₄ šá ABSIN nn mm [...]
 5' [...] G]U₄-UD ina ŠÚ ina MÁŠ IGI [...]
 6' [...] G]U₄-UD ina NIM ina MÁŠ IGI [...]
 7' [...] SIG S]I MÁŠ 2½ KÙŠ 27 [...]
-
- 8' [MU]-1-me-29-KAM ¹Se LUGAL 'BAR' [x GENNA ina zib^{me} IGI]
 9' [x] 'x' GENNA SIG MÚL KUR šá DUR [nu-nu nn mm ŠU x GENNA ana NIM ki UŠ-ú]
 10' [nn] KÙŠ ár MÚL KUR šá DUR nu-nu [UŠ x x ina ZÁLAG GENNA]
 11' [SIG MÚL] KUR šá DUR nu-nu 2 2/3 KÙŠ [GAN x GENNA ana ŠÚ ki UŠ-a]
 12' [nn] KÙŠ ina IGI MÚL KUR šá DUR n[u-nu UŠ x x USAN]
 13' [GENN]A SIG MÚL KUR šá DUR nu-n[u nn mm]
-
- 14' [...] 'KAM' ¹An u ¹An 'A'-'šú LUGAL^{meš} [...]
 15' [...] 5 'x' [...]
 16' [...] 'x' [...]
 17' [...] 'x' [...]

'Rev.'

I

- 1' [...] 'x' [...]
 2' [...] ŠÚ na
 3' [...] ME GE₆
 4' [...],30 ŠÚ na
 5' [...],30 ME GE₆
 6' [...]+1,40 ŠÚ na
 7' [...]+1,20 ME GE₆
 8' [...],50 ŠÚ na
 9' [...] 5 ME GE₆
 10' [...] 'x' [...]

II

- 1' 10+[x]
 2' 10+[x]
 3' 20+[x]
 4' 'x' [...]
 5' 10+[x]

No. 64

'Obv.'

- 1' [...] [...]
 2' [...] Mercury's] first appearance [in the west in] Virgo; sunset to setting of Mercury: 14°
 [...] [...]
 3' [...] Mercury's [first appearance] in the east in Virgo, 1 cubit [in front of Saturn]
 4' [...] last part of the night, Mercury was [...] above α [Virginis]
 5' [...] Mercury's first appearance in the west in Capricorn [...]
 6' [...] Mercury's first appearance in the east in Capricorn [...]
 7' [...] 2½ cubits [below] β Capricorni. The 27th, [...]
-
- 8' [Year] 129, king Seleucus. Month I, [the xth, Saturn's first appearance in Pisces.]
 9' [...], Saturn was [...] below η Piscium. [Month IV, the xth, when Saturn became stationary to the east,]
 10' [it became stationary nn] cubits behind η Piscium. [...], last part of the night, Saturn was]
 11' 2 2/3 cubits [below] η Piscium. [Month IX, the xth, when Saturn became stationary to the west,]
 12' [it became stationary nn] cubits in front of η Piscium [...], first part of the night,]
 13' [Satu]rn was [...] below η Piscium.
-
- 14' [Year 109, kings] Antiochus and [his] son Antiochus. [...]
 15' [...] [...]
 16'-17' [...] [...]

'Rev.'

I

- 1' [...] [...]
 2' [...] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 3' [...] 'moonrise to sunset' (plus) 'sunset to moonrise': [...]
 4' [...] 'moonset to sunrise' (plus) 'sunrise to moonset': [x°] 30'
 5' [...] 'moonrise to sunset' (plus) 'sunset to moonrise': [x°] 30'
 6' [...] 'moonset to sunrise' (plus) 'sunrise to moonset': [x]+1° 40'
 7' [...] 'moonrise to sunset' (plus) 'sunset to moonrise': [x]+1° 20'
 8' [...] 'moonset to sunrise' (plus) 'sunrise to moonset': [x°] 50'
 9' [...] 'moonrise to sunset' (plus) 'sunset to moonrise': [x]+5°
 10' [...] [...]

II

- 1' The 10+[xth,]
 2' The 10+[xth,]
 3' The 20+[xth,]
 4' [...]
 5' The 10+[xth,]

No. 65

BM 34150 (= Sp 253)

Copy: LBAT 1308

Photo: Pl. 44

Goal-year: SE 188

'Obv.'

- 1' [...] 'x' MÚL-BABBAR [...]
 2' [...] *ana* ME E-a AB EN [...]
 3' [...] (blank)
-
- 4' [...] 'x' GE₆ 5 *ina* ZÁLAG MÚL-BABBAR 'e' [...]
-
- 5' [...] SIG 5 *dele-bat ina* ŠÚ *ina* MAŠ-MAŠ IGI [...]
 6' [...] '8' SI GE₆ 17 USA[N] [...]
 7' [...] GÍR-TAB 8' SI DU₆ [...]
 8' [...] KI]R₄ *šil* PA 1 SI [x x] 'x' 29' [...]
 9' [...] *ša* SUḪUR MÁŠ 1 SI [GE₆] 24 U[SAN *dele-bat* [...]
 10' [...] 10 *na dele-bat in* 3 *dele-bat* [*ina* Š]Ú *ina* zib^{me} ŠÚ
 11' [...] (blank)
-
- 12' [...] IGI NU PAP GE₆ 14 USA[N] GU₄-UD [...]
 13' [...] SI GE₆ 24 USAN G[U₄-U]D [...]
 14' [...] GU₄-U]D *ina* NIM *ina* MAŠ-MAŠ I[GI] [...]
 15' [...] 'x x x' [...]

'Rev.'

I and II broken;

III

- 1' [...] 'a-kam' *muš*²¹
 2' [...] ME
 3' [...] GE₆
 4' [...] KUR' *a-kam muš*
 5' [...] 'x *muš*¹
 6' [...]
 7' [...] 'x'
 8' [...] 'x x x'

IV

- 1' 10+[x] [...]
 2' 20+[x] [...]
 3' ŠE 30 [...]

Date

Venus had a first appearance in the west on the 5th day of a month near the beginning of the year; she had a last appearance in the west in Pisces on the 3rd of a month close to the end of the same year; Jupiter had a second stationary point in month X, 63 years earlier. This suffices to find the goal-year as SE 188.

No. 65

'Obv.'

- 1' [...] Jupiter [...]
 2' [...] acronychal rising. Month X, until [...]
 3' [...] (blank)
-
- 4' [...] night of the 5th, last part of the night, Jupiter was [...] above [...]
-
- 5' [...] Month III,] the 5th, Venus' first appearance in the west in Gemini [...]
 6' [...] 8 fingers. Night of the 17th, first part of the night, [...]
 7' [...] 8' fingers [...] Scorpil. Month VII, [...]
 8' [...] 1 finger [...] Ophiuchi [...] 29th' [...]
 9' [...] 1 finger [...] Capricorni. [Night of] the 24th, [first part of the night, Venus]
 10' [...] sunset to setting of Venus: 10°. Around the 3rd, Venus' last appearance [in] the west in Pisces.
 11' [...] (blank)
-
- 12' [...] first appearance [...] I did not watch. Night of the 14th, first part of the night, Mercury [...]
 13' [...] fingers [...] Night of the 24th, first part of the night, Mercury [...]
 14' [...] Mer]cury's first appearance in the east in Gemini [...]
 15' [...] [...]

'Rev.'

I and II broken;

III

- 1' [...] measured (despite) mist.
 2' [...] moonrise to sunset: [...]
 3' [...] sunset to moonrise: [...]
 4' [...] moonrise to sunrise: [...] measured (despite) mist.
 5' [...] measured.
 6' [...]
 7' [...]
 8' [...]

IV

- 1' The 10+[xth,]
 2' The 20+[xth,]
 3' Month XII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]

No. 66

BM 33481 (= Rm 4,35)

Photo: Pl. 44

Goal year: SE 191

'Obv.'

- 1' [... ŠÚ šá GENNA ina] 'HUN² TA 10² ki' PAP NU 'IGI' [...]
 2' [...] GE₆ 2 ina ZÁLAG GENNA e is le₁₀ '1² KÙŠ' [...]
 3' [...] N]IM² UŠ DU₆ GE₆ 8 ina ZÁLAG GENNA ana ŠÚ ina [LAL-šú....]
 4' [...] x]+1 KÙŠ ina IGI is le₁₀ 1½² KÙŠ ana SI NIM 'UŠ x' [...]
 5' [...] (blank)
-
- 6' [...] x]+8¹ na-su in 7 IGI GAN in EN 10² AN ana NIM 'ki UŠ-ú'
 7' [...] 'x' AN ana ME E-a ŠE EN 3 AN ana ŠÚ 'ki² UŠ²-a'
 8' [...] (blank)
-
- 9' [...] 'x' ina ZÁLAG AN e is le₁₀ 2² ½ KÙŠ
 10' [...] šur GIGIR šá UL]Ú² 2/3 KÙŠ AN 4 U ana NIM DIB
 11' [...] šá še]-pít MAŠ-MAŠ 10 SI GE₆ 16
 12' [...] 'x x x'

'Rev.'

I and II broken;

III

- 1' [...] 'x' [...]
 2' [...] muš² 'ana šámaš SIG¹
 3' [...] ME DI]R² muš
 4' [...] ŠÚ DIR muš
 5' [...] x]+10 GE₆ DIR NU PAP
 6' [...] x]+1 na DIR muš
 7' [...] KUR₄ muš

IV

- 1' (traces)
 2' '14' 50 NINDA ŠÚ [...]
 3' 15 11 ME DIR [...]
 4' 15 13²,30¹ na x' [...]
 5' 16 5,30 GE₆ muš²
 6' '27' 17 KUR DIR muš
 7' ZÍZ 1 25 KUR₄ a-pir muš²
 8' 13 5 ŠÚ DIR muš
 9' 14 5 na 'muš²

Date

The following information is available: In the year GY-59, Saturn was in Taurus; it had a stationary point in the west somewhat in front of α Tauri. In the year GY-79, Mars had a

No. 66

'Obv.'

- 1' [... Saturn's last appearance in] Aries²: from the 10th², when I watched I did not see it.
 [...] [...]
 2' [...] night of the 2nd, last part of the night, Saturn was 1² cubit above α Tauri [...]
 3' [...] became stationary [...] Month VII, night of the 8th, last part of the night, Saturn, while [moving back] to the west, was [...]
 4' [...] it became stationary [x]+1 cubit in front of α Tauri, being 1½² cubits high to the north [...]
 5' [...] (blank)
-
- 6' [...] rising of Saturn to sunrise: [x]+8°; (ideal) first appearance on the 7th. Month IX, around until the 10th², when Mars became stationary to the east,
 7' [...] Mars' acronychal rising. Month XII, until the 3rd, when Mars became stationary to the west,
 8' [...] (blank)
-
- 9' [...], last part of the night, Mars was 2² ½ cubits above α Tauri.
 10' [...] Mars was] 2/3 cubit [above ζ Tau]ri, Mars having passed 4 fingers to the east.
 11' [...] 10 fingers [...] η/μ] Geminorum. Night of the 16th,
 12' [...]

'Rev.'

I and II broken;

III

- 1' [...] [...]
 2' [...] measured²; it was low² to the sun.
 3' [...] moonrise to sunset:; measured (despite) [clou]ds².
 4' [...] moonset to sunrise: [...]; measured (despite) clouds.
 5' [...] sunset to moonrise: [x]+10'; clouds, I did not watch.
 6' [...] sunrise to moonset: [x]+1°; measured (despite) clouds.
 7' [...] bright, measured.

IV

- 1'
 2' The 14th, moonset to sunrise: 50' [...]
 3' The 15th, moonrise to sunset: 11°; clouds [...]
 4' The 15th, sunrise to moonset: 13° 30'; [...]
 5' The 16th, sunset to moonrise: 5° 30', measured.
 6' The 27th, moonrise to sunrise: 17°; measured (despite) clouds.
 7' Month XI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 25°; it was bright, earthshine, measured.
 8' The 13th, moonset to sunrise: 5°; measured (despite) clouds.
 9' The 14th, sunrise to moonset: 5°, measured.

stationary point in the east around the date IX 10. Within the same year, there was a first appearance of Mars, and also a station in the west. I find only three pairs of years satisfying these conditions: SE 132 and 112; -384/3 and -404/3; -414/3 and -434/3. On VII 8, Saturn was next to a normal star (name not preserved). This decides in favor of SE 132 (and 112) because in this year α Tauri is in the required position; the other two possible years do not have a Normal star near Saturn on VII 8. In line 11', the day number 16 could belong to month IV (of the year GY-47, i.e. SE 144); Mars is above γ Geminorum on this date.

No. 67

BM 34186 (Sp 292)

Copy: LBA 1283

Photo: Pl. 44

Goal year: SE 191

Obv.:

- 1 [... MÚL-BABBAR ina] A ŠÚ IZI 21 MÚL-BABBAR ina A IGI 12,10² n[a²-su]
 2 [... G]IR ár šá A UŠ ZÍZ in 22 MÚL-BABBAR ana ME E-[a]
 3 [...] GIR ár šá A UŠ
 4 [...] ana NIM ina LAL-šú SIG SAG A 3½ KÙŠ
 5 [...] SIG GIŠ.KUN A 4½ KÙŠ
 6 [...] (blank)
 7 [...] KIN 1 dele-bat ina ŠÚ ina ABSIN IGI
 8 [... dele]-bat e MÚL IGI šá SUHUR MÁŠ 1 U
 9 [... GE₆ x]+6 USAN dele-bat
 10 [... x]+1 'KÙŠ²¹ GE₆ 26 USAN dele-bat
 11 [... DIR-Š]E GE₆ 8 USAN dele-bat e 'is' [le₁₀]
 12 [...] ina NIM [...]
 13 [...] 'x' [...]

'Rev.

- 1' [...] MU-1-me-27-KAM
 2' [šá ší-i MU-1-me-1,31-KAM ¹Ar]-šá-ka-a LUGAL kun-nu-[u²]

Comments

Obv. 11: reading and restorations based on computation.

No. 67

Obv.:

- 1 [... Jupiter's] last appearance [in] Leo. Month V, the 21st, Jupiter's first appearance in Leo; ri[sing of Jupiter to sunrise:] 12° 10'.
 2 [...] became stationary [...] β Virginis. Month XI, around the 22nd, Jupiter's acronychal rising.
 3 [...] became stationary [...] β Virginis.
 4 [...] when moving back to the east, was 3½ cubits below ε Leonis.
 5 [...] 4½ cubits below θ Leonis.
 6 [...] (blank)
 7 [...] Month VI, the 1st, Venus' first appearance in the west in Virgo.
 8 [...] Venus was 1 finger above γ Capricorni.
 9 [... night of the x]+6th, first part of the night, Venus was
 10 [... x]+1 cubit'. Night of the 26th, first part of the night, Venus was
 11 [... Mon]th XII₂, night of the 8th, first part of the night, Venus was [...] above α [Tauri.]
 12 [...] in the east [...]
 13 [...] [...]

'Rev.

- 1' [... which] were established for year 127,
 2' [which is year 191.] king Arsaces.

BM 38405 (= 80-11-12,288)

Listed as LBA *1284

Photo: Pl. 45

Goal year: SE 192

‘Obv.’

- 1' [...] 'x' [...] 'x' [...]
-
- 2' MU-1-me-9-KAM ¹An u ¹An A-šú 'LUGAL^{meš} ŠU [...] 'ana' NIM ina LAL-šú e 'GIR ár šá A 1¹ [...]
- 3' e SA₄ šá ABSIN 1 KÙŠ 6 SI ŠE GE₆ 1 ina² Z[ÁLAG' M]ÚL-BABBAR ana 'ŠÚ' [ina LA]L-šú e SA₄ šá ABSIN 1 ½ KÙŠ
-
- 4' MU-1-me-20-KAM šá ší-i MU-1-me-1,24-K[AM ¹A]r-šá-kam LUGAL BAR in 17 dele-bat ina ŠÚ ina MÚL-MÚL ŠÚ DIR NU PAP 29 dele-b[at]
- 5' KUR NIM-a 11 na-su in 28¹ IG[I SIG] GE₆ 2 ina ZÁLAG dele-bat e is le₁₀ 20 SI GE₆ 16 ina ZÁLAG dele-bat SIG šur GIGIR šá SI 4 KÙŠ G[E₆]
- 6' SIG šur GIGIR šá ULÙ 2/3 KÙŠ <GE₆> 30 ina ZÁLAG dele-bat SIG MÚL IGI šá še-pit MAŠ-MAŠ 1 KÙŠ ŠU GE₆ 2 ina ZÁLAG dele-bat SIG MÚL ár šá še-pit MAŠ-MAŠ 1 K[ÙŠ]
- 7' ina ZÁLAG dele-bat e MAŠ-MAŠ šá 'SIPA' 2 KÙŠ GE₆ 15 ina ZÁLAG dele-bat SIG MAŠ-MAŠ IGI 4 ½ KÙŠ GE₆ 20+[x] ina ZÁLAG dele-bat SIG MAŠ-MAŠ ár 3 ½ KÙŠ IZI G[E₆]
- 8' SIG MÚL ár šá ALLA šá ULÙ ½ KÙŠ GE₆ 15 ina ZÁLAG dele-bat SIG SAG A 5 KÙŠ GE₆ 23 ina [ZÁLAG dele-bat SI]G LUGAL 2 SI 'dele¹-bat¹ 2¹ [SI]
- 9' ina ZÁLAG dele-b[at] 'e' M[ÚL] TUR šá 4 KÙŠ ár LUGAL 1 SI TE KIN GE₆ 7 ina ZÁLAG dele-bat SIG GIŠ.KUN A 5 KÙŠ GE₆ 16 ina ZÁLAG dele-bat e G[IR ár šá A]
- 10' [G]E₆ 20+[x] ina ZÁLAG 'dele-bat SIG' DELE šá 'IGI ABSIN' 2/3¹ KÙŠ DU₆ GE₆ 8 ina ZÁLAG dele-bat e SA₄ šá ABSIN 1 2/3 KÙŠ GE₆ 25 ina ZÁLAG dele-bat e RÍ[N šá ULÙ]
- 11' GE₆ 29 ina ZÁLAG dele-bat SIG RÍN šá SI 2 ½ KÙŠ APIN GE₆ 10 ina ZÁLAG dele-bat e MÚL e šá [SAG] GIR-TAB 8 SI GE₆ 16 ina ZÁLAG dele-bat e S[I₄]
- 12' GE₆ 25 ina ZÁLAG dele-bat e MÚL KUR šá KIR₄ šil PA 1 KÙŠ AB 7 dele-bat 'ina NIM' [ina] 'MÁŠ ŠÚ' [x x] ŠE 23 dele-bat ina ŠÚ ina HUN IGI KUR NIM-a [...]
-
- 13' MU-1-me-46-KAM ¹An LUGAL GU₄ 9¹ GU₄-UD ina ŠÚ ina MAŠ-MAŠ IGI KUR NIM-a 16 [na-su] 'x USAN GU₄-UD' [...]
- 14' GE₆ 13 USAN GU₄-UD SIG MAŠ-MAŠ ár 2 KÙŠ SIG 16 18 na GU₄-U[D]
- 15' SIG dele-bat IGI 18 na-su in 11 IGI 27 15 na GU₄-UD IZI [...]

‘Obv.’

- 1' [...] [...] [...]
-
- 2' Year 109, kings Antiochus and his son Antiochus. Month IV, [... Jupiter,] while moving back to the east, was 1² [...] above β Virginis [...]
- 3' 1 cubit 6 fingers above α Virginis. Month XII, night of the 1st, last¹ [part of the night¹, Ju]piter, while moving back to the west, was 1 ½ cubits above α Virginis.
-
- 4' Year 120, which is year 184, king Arsaces. Month I, around the 17th, Venus' last appearance in the west in Taurus; clouds, I did not watch. The 29th, Ve[nus' first appearance]
- 5' it was bright (and) high, rising of Venus to sunrise: 11°; (ideal) first [appearance] on the 28th¹. [Month III,] night of the 2nd, last part of the night, Venus was 20 fingers above α Tauri. Night of the 16th, last part of the night, Venus was 4 cubits below β Tauri. Ni[ght]
- 6' 2/3 cubit below ζ Tauri. <Night of> the 30th, last part of the night, Venus was 1 cubit below η Geminorum. Month IV, night of the 2nd, last part of the night, Venus was 1 cubit below μ Geminorum. [...]
- 7' last part of the night, Venus was 2 cubits above γ Geminorum. Night of the 15th, last part of the night, Venus was 4 ½ cubits below α Geminorum. Night of the 20+[xth,] last part of the night, Venus was 3 ½ cubits below β Geminorum. Month V, ni[ght]
- 8' ½ cubit below δ Cancri. Night of the 15th, last part of the night, Venus was 5 cubits below ε Leonis. Night of the 23rd, la[st part of the night, Venus was] 2 fingers below α Leonis, Venus' being 2¹ [fingers']
- 9' last part of the night, Venus was 1 finger above ρ Leonis, it came close. Month VI, night of the 7th, last part of the night, Venus was 5 cubits below θ Leonis. Night of the 16th, last part of the night, Venus was [...] above β [Virginis]
- 10' [Ni]ght of the 20+[xth, last part of the night,] Venus was 2/3¹ cubit below γ Virginis. Month VII, night of the 8th, last part of the night, Venus was 1 2/3 cubits above α Virginis. Night of the 25th, last part of the night, Venus was [...] above α [Librae.]
- 11' Night of the 29th, last part of the night, Venus was 2 ½ cubits below β Librae. Month VIII, night of the 10th, last part of the night, Venus was 8 fingers above β Scorpii. Night of the 16th, last part of the night, Venus was [...] above α [Scorpii.]
- 12' Night of the 25th, last part of the night, Venus was 1 cubit above θ Ophiuchi. Month X, the 7th, Venus' last appearance in the east [in] Capricorn [...] Month XII, the 23rd, Venus' first appearance in the west in Aries; it was bright (and) high, [...]
-
- 13' Year 146, king Antiochus. Month II, the 9th, Mercury's first appearance in the west in Gemini; it was bright (and) high, [sunset to setting of Mercury:] 16° [... night of] the xth, first part of the night, Mercury was [...]
- 14' Night of the 13th, first part of the night, Mercury was 2 cubits below β Geminorum. Month III, the 16th, sunset to setting of Mercury: 18° [... Mercury's]
- 15' first appearance [in the east] below Venus; rising of Mercury to sunrise: 18°; (ideal) first appearance on the 11th. The 27th, rising of Mercury to sunrise: 15°. Month V, [...]

- 16' DU₆ in 11 GU₄-UD ina ŠÚ UD-DA ŠÚ-šú DIB 29 GU₄-UD ina NIM ina SAG GÍR-TAB [IGI]
 17' in 27² IGI APIN GE₆ 9 ina ZÁLAG GU₄-UD e MÚL e šá SAG GÍR-TAB 10 S[I GAN]
 18' in 5 GU₄-UD ina NIM ina PA ŠÚ AB 14² GU₄-UD ina ŠÚ ina GU IGI KUR NIM-a 10+[x na-su]
 19' 27 GU₄-UD ina NIM ina SAG zib^{me} IGI DIR NU PAP ŠE 23 GU₄-UD ina NIM ina TIL zib^m[^e ŠÚ]

 20' MU-1-me-33-KAM ¹Se LUGAL BAR 14 17 na GENNA in 17 GENNA ina MÚL-MÚL Š[Ú]
 21' SIG GE₆ 20 ina ZÁLAG GENNA SIG šur GIGIR šá SI 2 2/3 KÙŠ ŠU GE₆ 23 ina ZÁLAG GENNA [....]
 22' GENNA ana NIM ki-i UŠ-ú 1 KÙŠ ár šur GIGIR šá ULÙ 4 SI ana ¹SI¹ [NIM UŠ]
 23' e ¹šur¹ GIGIR šá ULÙ 6 SI APIN 11 GENNA ana ME ¹E-a¹ [....]
 24' EN 10 [GENN]A ana ŠÚ ki-i UŠ-a ½ KÙŠ ina IGI ¹šur¹ G[IGIR šá ULÙ]
 25' ¹SIG¹ [šur GIGI]R šá SI 3 KÙŠ ¹GE₆ 2¹ [....]

 26' [MU-1-me-13]-KAM ¹A[n]

‘Rev.’

I

- 1' [AB x] ŠÚ na
 2' [x] ME GE₆
 3' ZÍZ ¹x¹ ŠÚ na
 4' 17 ME GE₆
 5' ŠE 8,40 ŠÚ na
 6' 17,20 ME GE₆
 7' ¹MU-1-me-1,14-KAM¹
 8' [¹Ar]-šá-kam LUGAL
 9' ¹x¹ 29 A[N-KU₁₀ š]ámaš
 10' [x] ¹x¹ [x x] ¹x¹

II

- 1' GU₄ 3[0]
 2' 14 4² [ŠÚ]
 3' 15 1 ME
 4' 15 4,30 na DIR m[uš]
 5' 16 18 GE₆ DIR mu[š]
 6' 27 16 KUR muš
 7' SIG 1 17 KUR₄ a-kam muš

- 16' Month VII, around the 11th, Mercury's last appearance in the west, omitted. The 29th, Mercury's [first appearance] in the east in the beginning of Scorpius [....]
 17' (ideal) first appearance on the 27th². Month VIII, night of the 9th, last part of the night, Mercury was 10 fingers above β Scorpīi [.... Month IX,]
 18' around the 5th, Mercury's last appearance in the east in Sagittarius. Month X, the 14th², Mercury's first appearance in the west in Aquarius; it was bright (and) high, [sunset to setting of Mercury:] 10+[x°]
 19' The 27th, Mercury's first appearance in the east in the beginning of Pisces; clouds, I did not watch. Month XII, the 23rd, Mercury's [last appearance] in the east in the end of Pisces [....]

 20' Year 133, king Seleucus. Month I, the 14th, sunset to setting of Saturn: 17°. Around the 17th, Saturn's last appearance in Taurus [....]
 21' Month III, night of the 20th, last part of the night, Saturn was 2 2/3 cubits below β Tauri. Month IV, night of the 23rd, last part of the night, Saturn was [....]
 22' when Saturn became stationary to the east, [it became stationary] 1 cubit behind ζ Tauri, being 4 fingers [high] to the north. [....]
 23' 6 fingers above ζ Tauri. Month VIII, the 11th, Saturn's acronychal rising. [....]
 24' until the 10th, when Saturn became stationary to the west, [it became stationary] ½ cubit in front of ζ [Tauri]
 25' 3 cubits below β Tauri. Night of the 2nd, [....]

 26' [Year 113, king] An[tiochus.]

‘Rev.’

I

- 1' [Month X, ‘moonset to sunrise’ (plus) ‘sunrise to moonset’: [....]
 2' ‘moonrise to sunset’ (plus) ‘sunset to moonrise’: [....]
 3' Month XI, ‘moonset to sunrise’ (plus) ‘sunrise to moonset’:
 4' ‘moonrise to sunset’ (plus) ‘sunset to moonrise’: 17°.
 5' Month XII, ‘moonset to sunrise’ (plus) ‘sunrise to moonset’: 8° 40'.
 6' ‘moonrise to sunset’ (plus) ‘sunset to moonrise’: 17° 20'.
 7' Year 174,
 8' king [Ar]saces.
 9' Month x, the 29th, solar ec[lipse:]
 10' [....] [....]

II

- 1' Month II, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [....]
 2' The 14th, [moonset to sunrise:] 4°?
 3' The 15th, moonrise to sunset: 1°; [....]
 4' The 15th, sunrise to moonset: 4° 30'; measured (despite) clouds.
 5' The 16th, sunset to moonrise: 18°; measured (despite) clouds.
 6' The 27th, moonrise to sunrise: 16°; measured.
 7' Month III, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17°; it was bright, measured (despite) mist.

8' 13 12 ŠÚ
 9' 14 4 ME *muš*
 10' 14 1,30 *na mu[š]*
 11' 15 12 GE₆ [x (x)]
 12' 27¹ 18 KUR ¹*muš*²
 13'-17' (broken)
 18' ¹27¹ [...]

III

1' [x] ¹x¹ DIR *muš*

IV

1' 15 13 ¹ME' [...]
 2' 15 5 *na* [...]
 3' 16 2 GE₆ [...]
 4' 27 12,50 K[UR]
 5' BAR 1 18 KUR₄ *a-pir m[uš]*

Colophon

1 [U₄-1]-¹KAM' IGI-DU₄-A^{meš} DIB-*qa*^{me[š]} AN-KU₁₀]^{meš} *ša a-na* ¹MU-1-*me*-28-KAM' *ša šî-i*
 2 [MU-1-*me*-1,32-KAM ¹Ar-*ša-kam*] ¹LUGAL' *kun-nu-u'*

No. 69

BM 34034 (Sp. 130)

Copy: LBA 1285

Photo: Pl. 46f.

Goal Year: SE 194

Obverse mostly abraded and hard to read. Lunar section treated by L. Brack-Bernsen, in N. M. Swerdlow (ed.), *Ancient Astronomy and Celestial Divination* (Cambridge, MA 1999) 158-160.

Upper edge

5 (at beginning of obv.) *[ina a-mat* ^dEN *u* ^dGAS_{AN}-*ia liš*]-*lim*

Obv.

1 [MU-1-*me*-23-KAM] ¹x ¹x¹ [x] ¹BAR' *in* 15 MÚL-BABBAR *ana* ME [E-*a*] 19 MÚL-BABBAR *ana* ŠÚ *ki* UŠ-*a*
 2 [nn] ¹KUŠ *ár* ¹[RÍN *ša* S]I 3 KUŠ [*ana*] ULÙ SIG UŠ DU₆ 20 [x] *na* MÚL-BABBAR *in* 24 MÚL-BABBAR *ina* GÍR-TAB ŠÚ
 3 ¹APIN' 25 MÚ[L-BABB]AR *ina* GÍR-TAB 3½ KUŠ *ár* SI₄ IGI 11 *n[a-su in* 24 IGI ŠE *in* EN 28
 4 [M]ÚL-BABBAR *ana* NIM *k[i]* UŠ-*ú* 1 KUŠ *ár* 4.ÀM [IGI]^{meš} *ša* PA UŠ ŠE DIR

8' The 13th, moonset to sunrise: 12°.
 9' The 14th, moonrise to sunset: 4°; measured.
 10' The 14th, sunrise to moonset: 1° 30'; measured.
 11' The 15th, sunset to moonrise: 12°; [...]
 12' The 27th¹, moonrise to sunrise: 18°; measured.
 13'-17' (broken)
 18' The 27th, [...]

III

1' [...]; measured (despite) clouds.

IV

1' The 15th, moonrise to sunset: 13° [...]
 2' The 15th, sunrise to moonset: 5° [...]
 3' The 16th, sunset to moonrise: 2° [...]
 4' The 27th, moonrise to sunrise: 12° 50' [...]
 5' Month I, the 1st (of which followed the 30th of the preceding month, sunset to moonset: 18°; it was bright, earthshine, measured.

Colophon

1 [First days,] appearances, passings, and [eclipses] which were established for year 128, which is
 2 [year 192,] king [Arsaces.]

No. 69

Upper edge

5' [At the command of Bel and Beltija may it go] well.

Obv.

1 [Year 123,] Month I, around the 15th, Jupiter's acronychal [rising] the 19th, when Jupiter became stationary to the west,
 2 it became stationary [nn] cubits behind β [Librae], 3 cubits low to the south. Month VII, the 20th, sunset to setting of Jupiter: [...]; around the 24th, Jupiter's last appearance in Scorpius.
 3 Month VIII, the 25th, Jupiter's first appearance in Scorpius, 3½ cubits behind α Scorpii; rising of Jupiter to sunrise: 11°; (ideal) first appearance on the 24th. Month XII, around until the 28th,
 4 when Jupiter became stationary to the east, it became stationary 1 cubit behind the four [front ones] of Sagittarius. Month XII was intercalary.

- 5 MU-1-me-10-KAM [ŠE DIR² MU-1-me-11-KAM ¹An u ¹An] A-šú LUGAL^{meš} BAR GE₆
20 USAN MÚL-BABBAR
- 6 ana ŠÚ ina LAL-šú SIG 'RÍN' [šá SI nn mm] MÚL-BABBAR ana NIM ina LAL-šú
SIG RÍN šá SI 3 KÙŠ
- 7 GAN GE₆ 24 'ina' Z[ÁLAG MÚL-BABBAR e MÚL KUR šá KI]R₄ šil PA 1 KÙŠ
-
- 8 MU-1-me-1,2[6-KAM ¹Ar-šá-ka-a] LUGAL GU₄ GE₆ 4 ina ZÁLAG dele-bat SIG MÚL
KUR šá DUR nu-nu 4 KÙŠ
- 9 'GE₆ 9 ina' ZÁLAG dele-bat SIG MÚL IGI šá SAG ȚUN] 5 KÙŠ GE₆ 13 ina ZÁLAG
dele-bat SIG MÚL ár šá SAG ȚUN 6² [KÙŠ]
- 10 SIG² GE₆ ² 1² [ina ZÁLAG dele-bat SIG MÚL-MÚL nn mm G]E₆ 10² ina ZÁLAG dele-bat e
is le₁₀ 2 KÙŠ GE₆ 20 ina ZÁLAG dele-bat SIG šur G[IGIR šá SI] 2½ KÙŠ
- 11 GE₆ 20+[x] ŠU GE₆ 1 [ina ZÁLAG dele]-bat e MÚL IGI šá še-pít MAŠ-MAŠ 8 SI 'dele-
bat'
- 12 'ana NIM' D[IB] dele-bat 4 SI ana NIM DIB GE₆ 6 ina ZÁLAG dele-bat e MAŠ-MAŠ šá
'SIPA' 2² KÙŠ
- 13 'GE₆ 15²¹ ina [ZÁLAG dele-bat SIG MAŠ-MAŠ] IGI 4 KÙŠ GE₆ 1[8] ina ZÁLAG dele-bat
SIG MAŠ-MAŠ ár 5 [KÙŠ]
- 14 'KIN'²¹ [x x] na² dele-bat in 6 dele-[bat ina NIM] 'ina TIL A'²¹ ŠÚ APIN 23 dele-bat ina 'ŠÚ
ina SAG PA' IGI [²]
- 15 'x' [x] 'na-su in' 22 I[GI²] ZÍZ GE₆ [x USA]N dele-bat SIG MÚL KUR šá DUR nu-nu 2½
KÙŠ x x [....]
- 16 [SIG] MÚL IGI šá SAG ȚUN 3½ KÙŠ G[E₆ x USAN] dele-bat SIG MÚL 'ár' šá SAG²
ȚUN² 4½ KÙŠ GE₆ 10+[x] US[AN dele-bat SIG MÚL]-'MÚL'
- 17 1² ½ KÙŠ² DIR-ŠE GE₆ 7 USAN dele-bat [e is l]e₁₀ 3 KÙŠ GE₆ 14² USAN dele-bat SIG šur
GIGIR šá [SI nn mm]
- 18 GE₆ 20 USAN dele-bat e šur GIGIR šá ULÙ [nn] KÙŠ GE₆ 28 USAN dele-bat e MÚL IGI
šá še-pít [MAŠ-MAŠ nn mm]
- 19 GE₆ 30 USAN dele-bat e MÚL ár šá še-pít MAŠ-MAŠ [x x x] 'x'
-
- 20 MU-1-me-48-KAM ¹An LUGAL BAR 26 GU₄-UD ina [ŠÚ ina MÚL]-MÚL IGI KUR
NIM-a 16 na-su in [x IGI]
- 21 GU₄ GE₆ 2 USAN GU₄-UD SIG šur GIGIR šá SI 1½ KÙŠ G[E₆ x USA]N GU₄-UD e šur
GIGIR šá ULÙ [nn mm]
- 22 GE₆ 9 USAN GU₄-UD e MÚL IGI šá še-pít MAŠ-MAŠ 1 KÙŠ 4 SI [GU₄-U]D 4 U ana ŠÚ
LAL GE₆ 11 USAN [GU₄-UD]
- 23 e MÚL ár šá še-pít MAŠ-MAŠ 1 KÙŠ 4 SI GE₆ 15 USAN GU₄-UD [e MAŠ-MA]Š šá SIPA
4½ KÙŠ 'x' [.... ŠÚ šá GU₄-UD]
- 24 ina ŠÚ ina MAŠ-MAŠ TA 1 ki PAP NU IGI ŠU 7 GU₄-UD ina 'NIM' ina MAŠ-MAŠ IGI
'x' [x] 'na-su' in 4 [IGI]

- 5 Year 110: [month XII was intercalary. Year 111,] kings [Antiochus and Antiochus,] his
son. Month I, night of the 20th, first part of the night, Jupiter,
- 6 while moving back to the west, was [....] below [β] Librae. [....] Jupiter, while moving
back to the east, was 3 cubits below β Librae.
- 7 Month IX, night of the 24th, last [part of the night, Jupiter was] 1 cubit [above θ]
Ophiuchi.
-
- 8 Year 18[6,] king [Arsaces.] Month II, night of the 4th, last part of the night, Venus was
4 cubits below η Piscium.
- 9 Night of the 9th, last part of the [night, Venus was] 5 cubits [below β Arietis.] Night of
the 13th, last part of the night, Venus was 6² [cubits] below α Arietis.
- 10 Month III², night of the 1st², [last part of the night, Venus was below η Tauri. Ni]ght
of the 10th², last part of the night, Venus was 2 cubits above α Tauri. Night of the 20th,
last part of the night, Venus was 2½ cubits below β Tauri.
- 11 Night of the 20+[xth,] Month IV, night of the 1st, [last part of the night, Ve]nus was
8 fingers above η Geminorum, Venus
- 12 having passed <....> to the east. [....] Venus having passed 4 fingers to the east. Night of
the 6th, last part of the night, Venus was 2² cubits above γ Geminorum.
- 13 Night of the 15th², [last part of the night, Venus was] 4 cubits [below] α [Geminorum.]
Night of the 18th, last part of the night, Venus was 5 [cubits] below β Geminorum.
- 14 Month VI, [the xth,] rising of Venus to sunrise: [....] Around the 6th, Venus' last appearance
[in the east] in the end of Leo. Month VIII, the 23rd, Venus' first appearance in the west
in the beginning of Sagittarius;
- 15 sunset to setting of Venus:; (ideal) first appearance [on] the 22nd. Month XI, night of
the [xth, first part of the ni]ght, Venus was 2½ cubits below η Piscium [.... Venus
was]
- 16 3½ cubits [below] β Arietis. Ni]ght of the xth, first part of the night, Venus was 4½
cubits below α Arietis. Night of the 10+[xth, first part of the night, Venus was] 1² ½
cubits [below η Tau]ri.
- 17 Month XII₂, night of the 7th, first part of the night, Venus was 3 cubits [above α] Tauri.
Night of the 14th², first part of the night, Venus was [....] below [β] Tauri.
- 18 Night of the 20th, first part of the night, Venus was [nn] cubits above ζ Tauri. Night of
the 28th, first part of the night, Venus was [....] above η Geminorum.
- 19 Night of the 30th, first part of the night, Venus was [....] above μ Geminorum.
-
- 20 Year 148, king Antiochus. Month I, the 26th, Mercury's first appearance in the [west in
Tau]rus; it was bright (and) high, sunset to setting of Mercury: 16°; [(ideal) first
appearance] on [the xth.]
- 21 Month II, night of the 2nd, first part of the night, Mercury was 1½ cubits below β Tauri.
Night [of the xth, first part] of the night, Mercury was [....] above ζ Tauri.
- 22 Night of the 9th, first part of the night, Mercury was 1 cubit 4 fingers above η Geminorum,
Mercury being 4 fingers back to the west. Night of the 11th, first part of the night,
[Mercury was]
- 23 1 cubit 4 fingers above μ Geminorum. Night of the 15th, first part of the night, Mercury
was 4½ cubits [above γ] Geminorum [.... Mercury's last appearance]
- 24 in the west in Gemini: from the 1st, when I watched I did not see it. Month IV, the 7th,
Mercury's first appearance in the east in Gemini; rising of Mercury to sunrise::
[(ideal) first appearance] on the 4th.

- 25 23 GU₄-UD *ina* NIM *ina* ALLA ŠÚ NU PAP KIN 4 GU₄-UD *ina* ŠÚ *ina* ABSIN IGI
TUR 11 [x x x] 'x' [... ŠÚ šá GU₄-UD]
- 26 *ina* ŠÚ *ina* SAG RÍN TA 16 *ki* PAP NU IGI DU₆ 18 GU₄-UD *ina* NIM *ina* SAG RÍN 1 ½
[KÙŠ]
- 27 1 KÙŠ *ana* SI NIM IGI KUR NIM-*a* 17 *na-su in* 14 IGI APIN 16 12 *na* G[U₄-UD x GU₄-
UD]
- 28 *ina* NIM *ina* GÍR-TAB ŠÚ AB 5 GU₄-UD *ina* ŠÚ *ina* MÁŠ IGI KUR 15,30 *na-su in* 4 IGI
G[E₆¹ ŠÚ šá GU₄-UD *ina* ŠÚ]
- 29 *ina* GU TA 20 *ki* PAP NU IGI ZÍZ 10 GU₄-UD *ina* NIM *ina* MÁŠ 3 KÙŠ *ár* SI MÁŠ '1 ½¹
KÙŠ [x x x]
- 30 *ana* 'NIM' IGI KUR 17 *na-su in* 8 IGI GE₆ 25 *ina* ZÁLAG GU₄-UD *e* MÚL IGI šá
SUḪUR MÁŠ ½ [KÙŠ]
- 31 GE₆ 27 *ina* ZÁLAG GU₄-UD *e* MÚL *ár* šá SUḪUR MÁŠ ½ KÙŠ GU₄-UD 2/3 KÙŠ *ana*
[ŠÚ LAL¹ Š]E 17 ŠÚ šá GU₄-[UD *ina* NI]M
- 32 [*ina*] zib^{me} TA 14 *ina* TIL GU *ki* PAP NU IGI DIR-ŠE 23 GU₄-[UD *ina* ŠÚ] *ina* MÚL-
MÚL IGI KUR NIM-*a*
- 33 17 *na-su in* 20 *ina* TIL ḪUN IGI GE₆ 29 USAN GU₄-U[D SIG MÚL *ár* šá SA]G 'ḪUN' 4
KÙŠ
-
- 34 MU-1-*me*-34-KAM ŠE DIR MU-1-*me*-35-KAM ¹Se LUGAL BAR GE₆ 3 USAN GENNA
e [MÁŠ-MAŠ šá] SIPA 3 KÙŠ GU₄ 17 GENNA *ina* MÁŠ-MAŠ ŠÚ NU PAP
- 35 SIG 21 GENNA *ina* [MÁŠ-MAŠ] IGI KUR NIM-*a* 17 'na-su in' [x x IGI] x GE₆ 23 *ina*
ZÁLAG² GENNA
- 36 [*ana*] ŠÚ *ina* LAL-šú [x x] 'x x x x x' GENNA [....] 'GE₆² x x x x x' 4¹ KÙŠ¹

Lower edge

- 1 [x x GE₆] 4 *ina* ZÁLAG GENNA *ana* ŠÚ *ina* LAL-šú [....] *in* 11 GENNA *ana* ME E-*a* NU
[PAP]
- 2 'ZÍZ *in*' 11 GENNA *ana* ŠÚ *ki* UŠ-*a* 6 SI *ina* IGI 'MÁŠ-MAŠ' [IGI x]+½ KÙŠ *ana* ULÙ
SIG UŠ
- 3 MU-1-*me*-15-KAM ¹An *u* ¹An A-šú LUGAL^{meš} ŠE 1 19 *na* AN *in* 8 AN *ina* TIL zib^{me} ŠÚ
ŠE DI[R]
- 4 MU-1-*me*-47-KAM GU₄ GE₆ 20 USAN AN *ana* NIM *ina* LAL-šú SIG DELE šá IGI ABSIN
1 KÙŠ SIG GE₆ 15
- 5 [US]AN AN *e* SA₄ šá ABSIN 1 KÙŠ ŠU GE₆ 26 USAN AN SIG RÍN šá ULÙ 2/3 KÙŠ
- 6 'IZI' GE₆ [x] USAN AN SIG RÍN šá SI 3 KÙŠ GE₆ 22¹ USAN AN *e* MÚL MURUB₄

- 25 The 23rd, Mercury's last appearance in the east in Cancer; I did not watch. Month VI,
the 4th, Mercury's first appearance in the west in Virgo; it was small, [sunset to setting
of Mercury:] 11° [... Mercury's last appearance]
- 26 in the west in the beginning of Libra: from the 16th, when I watched I did not see it.
Month VII, the 18th, Mercury's first appearance in the east in the beginning of Libra,
1 ½ [cubits]
- 27 1 cubit high to the north; it was bright (and) high, rising of Mercury to sunrise: 17°;
(ideal) first appearance on the 14th. Month VIII, the 16th, rising of Mercury to sunrise:
12°. [The xth, Mercury's]
- 28 last appearance in the east in Scorpius. Month X, the 5th, Mercury's first appearance in
the west in Capricorn; it was bright, sunset to setting of Mercury: 15° 30'; (ideal) first
appearance on the 4th. Ni[ght² Mercury's last appearance in the west]
- 29 in Aquarius: from the 20th, when I watched I did not see it. Month XI, the 10th, Mercury's
first appearance in the east in Capricorn, 3 cubits behind β Capricorni, 1 ½¹ cubits [....]
- 30 to the east; it was bright, rising of Mercury to sunrise: 17°; (ideal) first appearance on the
8th. Night of the 25th, last part of the night, Mercury was ½ [cubit] above γ Capricorni.
- 31 Night of the 27th, last part of the night, Mercury was ½ cubit above δ Capricorni, Mercury
being 2/3 cubit [back to the west¹. Month] XII, the 17th, Mercury's last appearance [in
the ea]st
- 32 [in] Pisces: from the 14th in the end of Aquarius, when I watched I did not see it. Month
XII₂, the 23rd, Mercury's first appearance [in the west] in Taurus; it was bright (and)
high,
- 33 sunset to setting of Mercury: 17°; (ideal) first appearance on the 20th in the end of Aries.
Night of the 29th, first part of the night, Mercury was 4 cubits [below α] Arietis.
-
- 34 Year 134, month XII was intercalary. Year 135, king Seleucus. Month I, night of the 3rd,
first part of the night, Saturn was 3 cubits above γ Ge[minorum.] Month II, the 17th,
Saturn's last appearance in Gemini; I did not watch.
- 35 Month III, the 21st, Saturn's first appearance in [Gemini:] it was bright (and) high, rising
of Saturn to sunrise: 17°; [(ideal) first appearance] on [the xth.] Month, night of the
23rd, last part of the night, Saturn,
- 36 while moving back to the west, was [....] Saturn [....] night² 4 cubits²

Lower edge

- 1 [.... night] of the 4th, last part of the night, Saturn, while moving back to the west, [....]
Around the 11th, Saturn's acronychal rising; I did not [watch.]
- 2 Month XI, around the 11th, when Saturn became stationary to the west, it became
stationary 6 fingers in front of [α] Geminorum, being [x]+½ cubit low to the south.
- 3 Year 115, kings Antiochus and his son Antiochus. Month XII, the 1st, sunset to setting
of Mars: 19°. Around the 8th, Mars' last appearance in the end of Pisces. Month XII was
intercalary.
- 4 Year 147, month II, night of the 20th, first part of the night, Mars, while moving back to
the east, was 1 cubit below γ Virginis. Month III, night of the 15th,
- 5 [first] part of the night, Mars was 1 cubit above α Virginis. Month IV, night of the 26th,
first part of the night, Mars was 2/3 cubit below α Librae.
- 6 Month V, night of the [xth,] first part of the night, Mars was 3 cubits below β Librae.
Night of the 22nd¹, first part of the night, Mars was 6 fingers above δ

Rev.

- 1 šá SAG GÍR-TAB 6 SI AN 2 SI *ana* NIM DIB KIN GE₆ 4 USAN AN *e* SI₄ 2 KÜŠ GE₆ 19
 2 USAN AN *e* MÚL KUR šá KIR₄ šil PA 1 SI TE APIN GE₆ 16' USAN AN SIG SI MÁŠ
 2 KÜŠ
 3 GAN GE₆ 7 USAN AN *e* MÚL IGI šá SUḪUR MÁŠ 10 SI AN 4 U *ana* ŠÚ LAL GE₆ 10
 USAN AN *e* SUḪUR *ár* 10 SI

(The remainder of the rev. is divided into four columns, as usual.)

I

- 1 MU-1-*me*-1,15-KAM
 2 DU₆ 15 ŠÚ *na*
 3 8 ME GE₆
 4 APIN 15 ŠÚ *na*
 5 9,40 ME GE₆
 6 GAN 14,50 ŠÚ *na*
 7 12,10 ME GE₆
 8 AB 14 ŠÚ *na*
 9 13 ME GE₆
 10 ZÍZ 9,30 ŠÚ *na*
 11 13,30 ME GE₆
 12 ŠE 8,40 ŠÚ *na*
 13 14,30 ME GE₆
 14 MU-1-*me*-1,15-KAM
 15 DIR-ŠE GE₆ 15 7,40 ME
 16 DIR NU PAP *kip-pat ziq-pi*
 17 *sin* AN-KU₁₀ Á ULÛ *u* KUR
 18 'ki TAB-ú' *ina* 18 GE₆
 19 8 SI [GAR]-*an in* 1 DANNA
 20 GE₆ *ana* 'ZÁLAG'
 21 29 *šamáš* AN-[KU₁₀] 'Á'
 22 ULÛ *u* M[AR *ki* TAB-ú]
 23 *ina* 18 ME *ana* ŠÁ' [x ?]
 24 TIL-*ma* TIL-*tì* GAR-*an*
 25 *in* 24 ME NIM-*a*
 26 MU-1-*me*-1,16-KAM
 27 KIN GE₆ 14 1,30 [ME]
 28 [D]IR *u a-kam muš* [si]*n*
 29 [T]A *a-kam ki* 'E-*a*'
 30 [x] 'x' Á SI *u* [MA]R
 31 [x x] *in* 30 DANNA
 32 [x x x] 'šamáš'
 33 [x x x] 'x'

Rev.

- 1 Scorpil, Mars having passed 2 fingers to the east. Month VI, night of the 4th, first part of the night, Mars was 2 cubits above α Scorpil. Night of the 19th,
 2 first part of the night, Mars was 1 finger above θ Ophiuchi, it came close. Month VIII, night of the 16th, first part of the night, Mars was 2 cubits below β Capricorni.
 3 Month IX, night of the 7th, first part of the night, Mars was 10 fingers above γ Capricorni, Mars being 4 fingers back to the west. Night of the 10th, first part of the night, Mars was 10 fingers above δ Capricorni.

(The remainder of the rev. is divided into four columns, as usual.)

I

- 1 Year 175.
 2 Month VII 'moonset to sunrise' (plus) 'sunrise to moonset': 15°
 3 'moonrise to sunset' (plus) 'sunset to moonrise': 8°
 4 Month VIII 'moonset to sunrise' (plus) 'sunrise to moonset': 15°
 5 'moonrise to sunset' (plus) 'sunset to moonrise': 9° 40'
 6 Month IX 'moonset to sunrise' (plus) 'sunrise to moonset': 14° 50'
 7 'moonrise to sunset' (plus) 'sunset to moonrise': 12° 10'
 8 Month X 'moonset to sunrise' (plus) 'sunrise to moonset': 14°
 9 'moonrise to sunset' (plus) 'sunset to moonrise': 13°
 10 Month XI 'moonset to sunrise' (plus) 'sunrise to moonset': 9° 30'
 11 'moonrise to sunset' (plus) 'sunset to moonrise': 13° 30'
 12 Month XII 'moonset to sunrise' (plus) 'sunrise to moonset': 8° 40'
 13 'moonrise to sunset' (plus) 'sunset to moonrise': 14° 30'
 14 Year 175
 15 Month XII₂, night of the 15th, moonrise to sunset: 7° 40';
 16 clouds, I did not watch. When Corona culminated,
 17 lunar eclipse: when it began on the south and east side,
 18 in 18° of night
 19 it made 8 fingers. At 1 *bēru*
 20 before sunrise.
 21 The 29th, solar eclipse:
 22 [when it began] on the south and we[st] side,
 23 in 18° of daylight into' [...]
 24 it ended' and made a total (eclipse).
 25 At 24° after sunrise.
 26 Year 176
 27 Month VI, night of the 14th, [moonrise to sunset:] 1° 30',
 28 measured (despite) clouds and mist.
 29 When the moon came out from the mist,
 30 [...] on the north and west side
 31 [...] At 30°, i.e. one *bēru*,
 32 [...] solar' [eclipse]
 33 [...]

II

- 1 MU-1-me-1,15-KAM
- 2 DIR-ŠE 30 11 *na-su*
- 3 DIR *u a-kam ki* PAP NU PAP
- 4 14 3,50 ŠÚ DIR NU PAP
- 5 15 7,40 ME DIR NU PAP
- 6 15 3 *na* DIR *muš*
- 7 16 6,20 GE₆ DIR *muš*
- 8 27 16,30 KUR DIR NU PAP
- 9 MU-1-me-1,16-KAM
- 10 ¹*Ar-šá-ka-a* LUGAL
- 11 BAR 1 21 *na-su šin*¹ IGI-*ma*²
- 12 DIR NU PAP
- 13 14 4,10 ŠÚ DIR NU PAP
- 14 15 3,20 ME DIR NU PAP
- 15 15 4 *na* DIR *muš*
- 16 16 10,40 GE₆ DIR NU PAP
- 17 27 15 KUR DIR 'NU PAP¹
- 18 GU₄ 30 12+[x n]*a-su*
- 19 S[IG¹ x x x] 'x¹ IGI²
- 20 15 10+[x ME] *a-kam muš*
- 21 15 [x] ŠÚ
- 22 16 6 GE₆
- 23 16 9 *na muš*
- 24 28 9,50 KUR *a-kam*
- 25 KALAG *ki* PAP NU IGI
- 26 SIG 1 23 *na-su* KUR₄
- 27 [a]-*pir muš ina* GUB IGI *ana šamáš* NIM
- 28 '14¹ 10 UŠME DIR *muš*
- 29 14 9 ŠÚ
- 30 15 4,20¹ GE₆ *a-kam muš*
- 31 15 5,30 *na muš*
- 32 27 20,30 KUR *muš*
- 33 ŠU 30 13 *na-su a-kam*
- 34 KALAG *ki* PAP NU IGI
- 35 14 12,20 ME *muš*
- 36 14 15 ŠÚ
- 37 15 40 NINDA GE₆
- 38 15 2,20 *na* 28 14,20 KUR DIR NU PAP
- 39 'x x x NU PAP¹

II

- 1 Year 175
- 2 Month XII₂, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 11° 20';
- 3 clouds and mist, when I watched I did not see it.
- 4 The 14th, moonset to sunrise: 3° 50'; clouds, I did not watch.
- 5 The 15th, moonrise to sunset: 7° 40'; clouds, I did not watch.
- 6 The 15th, sunrise to moonset: 3°; measured (despite) clouds.
- 7 The 16th, sunset to moonrise: 6° 20'; measured (despite) clouds.
- 8 The 27th, moonrise to sunrise: 16° 30'; clouds, I did not watch.
- 9 Year 176,
- 10 king Arsaces.
- 11 Month I, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 21°; the moon² could be seen;
- 12 clouds, I did not watch.
- 13 The 14th, moonset to sunrise: 4° 10'; clouds, I did not watch.
- 14 The 15th, moonrise to sunset: 3° 20'; clouds, I did not watch.
- 15 The 15th, sunrise to moonset: 4°; measured (despite) clouds.
- 16 The 16th, sunset to moonrise: 10° 40'; clouds, I did not watch.
- 17 The 27th, moonrise to sunrise: 15°; clouds, I did not watch.
- 18 Month II, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 12+[x°;]
- 19 it was f[aint,]
- 20 The 15th, [moonrise to sunset]: 10+[x°;] measured (despite) mist.
- 21 The 15th, moonset to sunrise: [x°.]
- 22 The 16th, sunset to moonrise: 6°.
- 23 The 16th, sunrise to moonset: 9°; measured.
- 24 The 28th, moonrise to sunrise: 9° 50';
- 25 dense mist, when I watched I did not see it.
- 26 Month III, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 23°; it was bright,
- 27 earthshine, measured; it could be seen while (the sun) stood there; it was high to the sun.
- 28 The 14th, moonrise to sunset: 10°; measured (despite) clouds.
- 29 The 14th, moonset to sunrise: 9°.
- 30 The 15th, sunset to moonrise: 4° 20'¹; measured (despite) mist.
- 31 The 15th, sunrise to moonset: 5° 30'; measured.
- 32 The 27th, moonrise to sunrise: 20° 30'; measured.
- 33 Month IV, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 13°;
- 34 dense mist, when I watched I did not see it.
- 35 The 14th, moonrise to sunset: 12° 20'; measured.
- 36 The 14th, moonset to sunrise: 15°.
- 37 The 15th, sunset to moonrise: 40'.
- 38 The 15th, sunrise to moonset: 2° 20'. The 28th, moonrise to sunrise: 14° 20'; clouds, I did not watch.
- 39 I did not watch.

III

- 1 IZI 1 15,10 *na-su*
 2 DIR *u a-kam* KALAG NU PAP
 3 14 4 ME *a-kam muš*
 4 14 2,20 ŠÚ
 5 15 5 GE₆ *muš*
 6 15 15 *na muš*
 7 27 20 KUR DIR *muš*
 8 KIN 1 12 *na-[su]*
 9 KUR₄ *muš ana [šamáš x]*
 10 13 7 [ŠÚ] *muš*
 11 14 [x] ME DIR *u a muš*
 12 14 [x n] *a muš*
 13 1[5 x] GE₆ *muš*
 14 27 16¹ KUR
 15 DU₆ 1 11,30 *na-su*
 16 KUR₄ *a-kam¹ muš ana šamáš SIG*
 17 12 13 ŠÚ *muš*
 18 13 7 ME NU PAP
 19 13 3,40 *na a-kam muš*
 20 14 1,10+¹x¹ GE₆ *muš*
 21 27 15,30 KUR *muš*
 22 APIN 1 15 *na-su* KUR₄
 23 *a-pir muš ina GUB IGI ana šamáš SIG*
 24 12 2 ŠÚ DIR NU PAP
 25 13 5 ME DIR NU PAP
 26 13 13 *na* DIR NU PAP
 27 14 4 GE₆ DIR NU PAP
 28 26 22 KUR DIR *muš*

IV

- 1 GAN 30 10,20 DIR NU PAP
 2 13¹ 7,30 ŠÚ¹ [x x]
 3 10+[x]6,30 [x x x]
 4 10+[x]¹x¹ [x x x]
 5 10+[x x x x x]
 6 [...]
 7 AB 1 22 *n[a-su¹]*
 8 *a-pir muš ina GUB IGI¹*
 9 11 13,40 ŠÚ NU PAP
 10 12 1,30 *na*

III

- 1 Month V, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 15° 10';
 2 clouds and dense mist, I did not watch.
 3 The 14th, moonrise to sunset: 4°; measured (despite) mist.
 4 The 14th, moonset to sunrise: 2° 20'.
 5 The 15th, sunset to moonrise: 5°; measured.
 6 The 15th, sunrise to moonset: 15°; measured.
 7 The 27th, moonrise to sunrise: 20°; measured (despite) clouds.
 8 Month VI, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 12°;
 9 it was bright, measured; it was [...] to [the sun.]
 10 The 13th, [moonset to sunrise:] 7°; measured.
 11 The 14th, moonrise to sunset: [x°]; measured (despite) clouds and mist.
 12 The 14th, sunrise to moonset: [x°]; measured.
 13 The 15th, sunset to moonrise: [x°]; measured.
 14 The 27th, moonrise to sunrise: 16°.
 15 Month VII, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 11° 30';
 16 it was bright, measured (despite) mist; it was low to the sun.
 17 The 12th, moonset to sunrise: 13°; measured.
 18 The 13th, moonrise to sunset: 7°; I did not watch.
 19 The 13th, sunrise to moonset: 3° 40'; measured (despite) mist.
 20 The 14th, sunset to moonrise: 1° 10+x'; measured.
 21 The 27th, moonrise to sunrise: 15° 30'; measured.
 22 Month VIII, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 15°; it was bright,
 23 earthshine, measured; it could be seen while (the sun) stood there; it was low to the sun.
 24 The 12th, moonset to sunrise: 2°; clouds, I did not watch.
 25 The 13th, moonrise to sunset: 5°; clouds, I did not watch.
 26 The 13th, sunrise to moonset: 13°; clouds, I did not watch.
 27 The 14th, sunset to moonrise: 4°; clouds, I did not watch.
 28 The 26th, moonrise to sunrise: 22°; measured (despite) clouds.

IV

- 1 Month IX, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 10° 20'; clouds, I did not watch.
 2 The 13th, moonset to sunrise¹: 7° 30'; [...]
 3 The 10+[xth,] 6° 30'; [...]
 4 The 10+[xth,] [...]
 5 The 10+[xth,] [...]
 6 [...]
 7 Month X, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 22°; [...]
 8 earthshine, measured; it could be seen while (the sun) stood there.
 9 The 11th, moonset to sunrise: 13° 40'; I did not watch.
 10 The 12th, sunrise to moonset: 1° 30'.

- 11 13 5,30 ME *a-kam muš*
 12 14 7,30 GE₆ DIR NU PAP
 13 27 10,10 KUR DIR NU PAP
 14 ZÍZ 30 17 *na-su* KUR₄
 15 *a-pir muš ina* GUB IGI
 16 12 6 ŠÚ DIR NU PAP
 17 13 2,50 *na* DIR NU PAP
 18 14 ME GE₆ NU 'TUK DIR' NU PAP
 19 15 15 GE₆ DIR NU PAP
 20 27 11 KUR *a-kam muš*
 21 ŠE 30 13 *na-su* DIR NU PAP
 22 13 4,30 ŠÚ *muš*
 23 14 7 ME *a-kam muš*
 24 14 2,30 *na muš*
 25 15 6 GE₆
 26 27 16 KUR DIR *muš*
 27 BAR 30 10,40 *na a-kam*
 28 *ki* PAP NU IGI

Colophon (across cols. III and IV)

U₄-1-KAM IGI-DU₆-A^{meš} DIB-*ga*^{meš} u AN-KU₁₀^{meš}
 šá ana MU-1-me-1,34-KAM ¹Ar-šá-ka-a LUGAL *kun-nu-u'*

Upper edge (continuation of rev. I)

- 1 [...] *in* 18 ME *ana* ŠÚ *šamáš* IGI-TAB
 2 [...] AN-KU₁₀ *šamáš*² *a-kam ki* PAP NU IGI *in* 1,8 ME *ana* ŠÚ *šamáš*
 3 [...] 'x *a-kam muš*¹ MÚL ŠUDUN ANŠ[E] 'ár¹-ú *ziq-pi*
 4 [...] Á UL]Ù u KUR *ki-i* TAB-ú *ina* 30+[x GE₆] *gab-bi* ŠÚ-*im in* 1,5 GE₆ *ana* ZÁLAG
 For beginning of obv. see above.

Comments

- 1: the king's name should be Antiochus.
 4: computation shows Jupiter to be near μ Sagittarii, which is one of the western group of four stars used as 'Normal stars' in Sagittarius as identified by N. Roughton in JHA 23 (1992) 193-200.
 9: The restoration of β Arietis fits the measurement '5 cubits'; but there is not enough room for the date in the beginning of the line.
 11f.: in reading the beginning of line 12 as *ana* NIM DIB, I have to assume that a number and a measure was left out between it and *dele-bat* at the end of line 11.
 34: The statement about the intercalary month is written on the left edge.
 35: The month name should be DU₆ if the star passed by Saturn in line 36 was β Geminorum.
 Rev. I 14-20: lunar eclipse of -135 Apr 1.
 I 19: the number 1 before DANNA is written over an erasure.
 I 21-25: solar eclipse of -135 Apr 15.
 I 26-31: lunar eclipse of -135 Sep 24.
 Upper edge 1: the remark IGI-TAB 'checked' is separated from the text by some space.
 For the eclipses recorded on the upper edge, see Huber and De Meis p.137.

- 11 The 13th, moonrise to sunset: 5° 30'; measured (despite) clouds.
 12 The 14th, sunset to moonrise: 7° 30'; clouds, I did not watch.
 13 The 27th, moonrise to sunrise: 10° 10'; clouds, I did not watch.
 14 Month XI, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 17°; it was bright,
 15 earthshine, measured; it could be seen while (the sun) stood there.
 16 The 12th, moonset to sunrise: 6°; clouds, I did not watch.
 17 The 13th, sunrise to moonset: 2° 50'; clouds, I did not watch.
 18 The 14th, there was no 'moonrise to sunset' (or) 'sunset to moonrise'; clouds, I did not watch.
 19 The 15th, sunset to moonrise: 15°; clouds, I did not watch.
 20 The 27th, moonrise to sunrise: 11°; measured (despite) mist.
 21 Month XII, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 13°; clouds, I did not watch.
 22 The 13th, moonset to sunrise: 4° 30'; measured.
 23 The 14th, moonrise to sunset: 7°; measured (despite) mist.
 24 The 14th, sunrise to moonset: 2° 30'; measured.
 25 The 15th, sunset to moonrise: 6°.
 26 The 27th, moonrise to sunrise: 16°; measured (despite) clouds.
 27 Month I, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 10° 40'; mist,
 28 when I watched I did not see it.

Colophon (across cols. III and IV)

First days, appearances, passings, and eclipses
 which were established for year 194, king Arsaces.

Upper edge (continuation of rev. I)

- 1 [...] At 18° before sunset. Checked.
 2 [...] solar¹ [eclipse]; mist, when I watched I did not see it. At 68° before sunset.
 3 [...] measured (despite) mist. When the 'Rear Donkey Yoke' culminated,
 4 [lunar eclipse:] when it began on the south and east [side,] in 30+[x° of night] all was covered. At 65° before sunrise.
 For beginning of obv. see above.

No. 70

BM 41108 (= 81-4-28, 655)

Listed as LBAT *1286

Photo: Pl. 46

Goal year: SE 196

'Obv.'

1' 'x' [...]

2' MU-1-me-13-KAM 'An' [...]

3' MÚL-BABBAR e MÚL ár [ša SUḪUR MÁŠ]

4' MU-1-me-24-KAM ša ši-'i' [MU-1-me-1,28-KAM]

5' IZI GE₆ 21 USAN dele-bat 'e' [SA₄ ša ABSIN]

6' USAN dele-bat SIG RÍN ša SI 3 [KÜŠ dele-bat]

7' e SI₄ 2 KÜŠ GE₆ 12 U[SAN]8' [GAN] 'GE₆' 4 USAN dele-bat 'e MÚL' [IGI ša SUḪUR MÁŠ]

9' [...] 'x' [...]

'Rev.'

I

1' 'x' [...]

2' ina 10 UŠ GE₆ '3 SI' GAR-'an'3' '4' GE₆ 'IR ana ZÁLAG ki-i TAB-ú4' ina 10 UŠ GE₆ TA KUR ana SI ZÁLAG5' in 32 GE₆ GIN ZÍZ GE₆6' 13 AN-KU₁₀ sin 5 ÁB BAR DIB7' in 1,32 GE₆ ana ZÁLAG 28'8' šamas AN-KU₁₀ Á ULÛ u MAR

9' [k]i-'i' TAB-ú' [...]

II

1' 'x 30' [...]

2' 14 [...]

3' 14+[x]

4' 10+[x]

Comments

Rev. I 1'-5': lunar eclipse of -133 Sep 3.

5'-7': lunar eclipse of -132 Jan 29.

7'-9': solar eclipse of -132 Feb 13.

For these eclipses, reports are also preserved in Diaries for SE 178.

No. 70

'Obv.'

1' [...]

2' Year 113, [kings] Antiochus [and his son Antiochus]

3' Jupiter was [...] above δ [Capricorni.]

4' Year 124, which is [year 188,]

5' Month V, night of the 21st, first part of the night, Venus was [...] above [α Virginis]

6' first part of the night, Venus was 3 [cubits] below β Librae [... Venus was]

7' 2 cubits above α Scorpii. Night of the 12th, first part of the night, [...]

8' [Month IX,] night of the 4th, first part of the night, Venus was [...] above [γ Capricorni
....]

9' [...] [...]

'Rev.'

I

1' [...]

2' in 10° of night, it made 3 fingers.

3' 4° of night maximal phase. When it began to clear,

4' it cleared in 10° of night from east to north.

5' At 32° after sunset. Month XI, night

6' of the 13th, lunar eclipse (after) 5 months, BAR, omitted.

7' At 92° before sunrise. The 28th',

8' solar eclipse;

9' when it began on the south and west side, [...]

II

1' Month, (the 1st of which was identical with) the 30th (of the preceding month,
sunset to moonset:) [...]

2' The 14th, [...]

3' The 14+[xth,]

4' The 10+[xth,]

No. 71

BM 34455 + 35398 (= Sp 579 + II 980)

Copy: LBA 1287 (35398), 1325 (34455)

Photo: Pl. 48

Goal-year: SE 198

Bibliography: for the join see N. A. Roughton and P. K. Koch, JCS 35 (1983) 133f.

'Obv.

- 1' [...] 'x x x x x x' [...]
- 2' [...] IGI]-DU₈^{meš} DIB-qa^{meš} šá MÚL-BABBAR ina zib^{me} [...]
- 3' [...] MU]-1-me-1,30-KAM ¹Ar-šá-ka-a LUGAL BAR GE₆ 5 USA[N]
- 4' [...] 'MÚL' IGI šá še-pít MAŠ-MAŠ 1 KÙŠ GE₆ 15 USAN dele-bat e MÚL ár šá š[e-pít MAŠ-MAŠ nn mm]
- 5' [...] GE₆ x]+8 USAN dele-bat e MAŠ-MAŠ šá SIPA 4 KÙŠ dele-bat 4 U ana NIM DIB GE₆ [...]
- 6' [...] G]E₆¹ 1 USAN dele-bat SIG MAŠ-MAŠ ár 2 KÙŠ GE₆ 13 USAN dele-bat e MÚL ár [šá ALLA šá]
- 7' [...] SIG] SAG A 3 KÙŠ SIG GE₆ 2 USAN dele-bat e LUGAL 20 SI dele-bat 4 SI ana NIM D[IB]
- 8' [...] šá 4 K]ÙŠ ár LUGAL 2/3 KÙŠ dele-bat 4 SI ana NIM DIB GE₆ 17 USAN dele-bat SIG GIŠ.KUN A 4½ [KÙŠ]
- 9' [...] GÌR] ár šá A 3 SI ŠU GE₆ 15 USAN dele-bat SIG DELE šá IGI ABSIN 1½ KÙŠ 'GE₆ 29¹ [...]
- 10' [...] 'x' ½ KÙŠ KIN 1 8' na dele-bat in 3 dele-bat ina ŠÚ ina SAG RÍN ŠÚ 27 dele-bat ina NI[M]
- 11' [...] GE₆ 21¹+ [x] ina ZÁLAG dele-bat e SA₄ šá ABSIN 8 U APIN GE₆ 22 ina ZÁLAG dele-bat e [RÍN šá ULÙ nn mm]
- 12' [...] dele-bat 'SIG RÍN' šá SI 2 KÙŠ GAN GE₆ 10 ina ZÁLAG dele-bat e MÚL e šá SAG GÍR-TAB 2/3 K[ÙŠ]
- 13' [...] GE₆ x]+7 ina ZÁLAG dele-bat e MÚL KUR šá KIR₄ šil PA 1 KÙŠ ZÍZ GE₆ 6 ina ZÁLAG dele-bat SIG S[I MÁŠ nn mm]
- 14' [...] e] MÚL IGI šá SUḪUR MÁŠ 1 KÙŠ GE₆ 22 ina ZÁLAG dele-bat e MÚL ár šá SUḪUR M[ÁŠ nn mm]
- 15' [MU]-1-me-52-KAM] ¹De-met-ri LUGAL BAR in 2 GU₄-UD ina NIM UD-DA IGI DIB in 20 GU₄-UD ina NIM [UD-DA ŠÚ-šú DIB]
- 16' [...] GU₄-U]D ina ŠÚ ina MAŠ-MAŠ IGI NU PAP GE₆ 24 USAN GU₄-UD SIG MAŠ-MAŠ ár 2½ KÙŠ SIG GE₆ 1¹+ [x]
- 17' [...] Û]LU 2/3 KÙŠ GE₆ 12 USAN GU₄-UD SIG SAG A 4 KÙŠ ŠU 2 ŠÚ šá GU₄-UD [...]
- 18' [...] 'x' 27 GU₄-UD ina NIM ina TIL ALLA 1 KÙŠ ina IGI sin ana ŠÚ IGI KUR NIM-a 14+ [x na-su]

No. 71

'Obv.

- 1' [...] [...]
- 2' [...] first] appearances (and) passings of Jupiter in Pisces [...]
- 3' [...] Year] 190, king Arsaces. Month I, night of the 5th, first part of the night, [...]
- 4' [...] 1 cubit [...] η Geminorum. Night of the 15th, first part of the night, Venus was [...] above μ Gem[inorum]
- 5' [...] night of the x]+8th, first part of the night, Venus was 4 cubits above γ Geminorum, Venus having passed 4 fingers to the east. Night [...]
- 6' [...] ni]ght' of the 1st, first part of the night, Venus was 2 cubits below β Geminorum. Night of the 13th, first part of the night, Venus was [...] above [γ/δ] Cancrī.
- 7' [...] 3 cubits [below] ε Leonis. Month III, night of the 2nd, first part of the night, Venus was 20 fingers above α Leonis, Venus having passed 4 fingers to the east [...]
- 8' [...] 2/3 cubit [...] q] Leonis, Venus having passed 4 fingers to the east. Night of the 17th, first part of the night, Venus was 4½ cubits below θ Leonis [...]
- 9' [...] 3 fingers [...] β Virginis. Month IV, night of the 15th, first part of the night, Venus was 1½ cubits below γ Virginis. Night of the 29th¹, [...]
- 10' [...] ½ cubit. Month VI, the 1st, sunset to setting of Venus: 8^o. Around the 3rd, Venus' last appearance in the west in the beginning of Libra. The 27th, Venus' [first appearance] in the east [...]
- 11' [...] Night of the 21¹+ [xth.], last part of the night, Venus was 8 fingers above α Virginis. Month VIII, night of the 22nd, last part of the night, Venus was [...] above [α Librae]
- 12' [...] Venus was 2 cubits below β Librae. Month IX, night of the 10th, last part of the night, Venus was 2/3 cubit above β Scorpī [...]
- 13' [...] night of the x]+7th, last part of the night, Venus was 1 cubit above θ Ophiuchi. Month XI, night of the 6th, last part of the night, Venus was [...] below β [Capricorni]
- 14' [...] 1 cubit [above] γ Capricorni. Night of the 22nd, last part of the night, Venus was [...] above δ Capricorni [...]
- 15' [Year 152,] king Demetrius. Month I, around the 2nd, Mercury's first appearance in the east, omitted. Around the 20th, Mercury's [last appearance] in the east [...], omitted ...]
- 16' [...] Mercury's first appearance in the west in Gemini; I did not watch. Night of the 24th, first part of the night, Mercury was 2½ cubits below β Geminorum. Month III, night of the 1+[xth,]
- 17' [...] 2/3 cubit [...] Night of the 12th, first part of the night, Mercury was 4 cubits below ε Leonis. Month IV, the 2nd, Mercury's last appearance [...]
- 18' [...] the 27th, Mercury's first appearance in the east in the end of Cancer, 1 cubit in front of the moon to the west; it was bright (and) high, [rising of Mercury to sunrise:] 14+[x°]

- 19' [...] LUGAL² 4 SI in 17 GU₄-UD ina NIM ina A ŠÚ NU PAP DU₆ in 11 ina ŠÚ [...]
- 20' [...] ŠÚ-šú DIB APIN 14 GU₄-UD ina NIM ina GÍR-TAB IGI KUR NIM-a 17,30 na²-[su]
- 21' [...] KÙŠ GAN GE₆ 4 ina ZÁLAG GU₄-UD e MÚL KUR šá KIR₄ šil PA '1 KÙŠ' [...]
- 22' [...] 'ZÍZ' 1 GU₄-UD ina ŠÚ ina SAG zib^{me} IGI KUR NIM-a 14 'na-su'¹ [...]
- 23' [...] 'ina ŠÚ' ina zib^{me} ŠÚ NU PAP 'ŠE 21'¹ GU₄-UD ina NIM ina zib^{me} IGI KUR NIM-a [...]
-
- 24' [...] 'na' GENNA in 13 'GENNA' [ina A²] 'ŠÚ' x x x¹ [...] 'x 28' x¹ [...]
- 25' [...] SIG GIŠ].KUN A 4 KÙŠ GAN [in²] 'x GENNA ana' [NIM ki UŠ]-ú 2 KÙŠ [...]
- 26' [...] UL]Ū' 'x x¹ [ZÍZ] in 8 GENNA ana ME E-a GE₆ 27 US[AN GENN]A SIG GIŠ.KUN 'A' [...]
-
- 27' [MU-1-me]-19-KAM 'An u 'An A-'šú LUGAL^{meš}1 BAR in EN 1 AN ana NIM [ki U]Š-ú 1½ KÙŠ ár 4. 'ÀM' [ár^{meš}]
- 28' [...] E-a SIG in [x] AN ana ŠÚ ki UŠ-a 2 [KÙŠ] 'ár' 4.ÀM 'IGI^{meš}1 [...]
-
- 29' [MU-1-me-51-KAM '1]'De-met-ri' LUGAL KIN GE₆ 22 USAN AN ana [NIM] ina LAL-šú SIG SI M[ÁŠ]
- 30' [...] 'SIG' MÚL IGI šá SUĤUR MÁŠ 2 U DIM₄ GE₆ '25'¹ USAN AN SIG M[ÚL ár šá SUĤUR MÁŠ nn mm]
- 31' [...] ana ŠÚ LAL AB GE₆ 4 USAN AN SIG MÚL KUR šá [D]UR nu-nu 'x x¹ [...]
- 32' [...] SIG] MÚL IGI šá SAG ĤUN 3½ KÙŠ GE₆ 20 USAN AN 'SIG' MÚL ár šá [SAG ĤUN]
- 33' [...] USAN AN SIG MÚL-MÚL 1½ KÙŠ ŠE GE₆ 9 USA[N]

Rev. destroyed except for a few wedges.

- 19' [...] 4 fingers [...] α Leonis. Around the 17th, Mercury's last appearance in the east in Leo; I did not watch. Month VII, around the 11th, (Mercury's) [first appearance] in the west [...]
- 20' [...] last appearance, omitted. Month VIII, the 14th, Mercury's first appearance in the east in Scorpius; it was bright (and) high, rising of Mercury to sunrise: 17° 30' [...]
- 21' [...] cubits. Month IX, night of the 4th, last part of the night, Mercury was 1 cubit [...] above θ Ophiuchi [...]
- 22' [...] Month XI, the 1st, Mercury's first appearance in the west in the beginning of Pisces; it was bright (and) high, sunset to setting of Mercury: 14° [...]
- 23' [...] last appearance in the west in Pisces; I did not watch. Month XII, the 21st², Mercury's first appearance in the east in Pisces; it was bright (and) high, [...]
-
- 24' [Year 139,] 'sunset to setting of' Saturn: [...] Around the 13th, Saturn's [last appearance in Leo'] the 28th² [...]
- 25' [...] 4 cubits [below θ] Leonis. Month IX, [around] the xth, [when] Saturn became stationary to the [east, it became stationary] 2 cubits [...]
- 26' [...] [Month XI,] around the 8th, Saturn's acronychal rising. Night of the 27th, first part of the night, Sat]urn was [...] below θ Leonis.
-
- 27' [Year 1]19, kings Antiochus and his son Antiochus. Month I, around until the 1st, [when] Mars became stationary to the east, [it became stationary] 1½ cubits behind the four [rear stars of Sagittarius]
- 28' [...] acronychal] rising. Month III, around [the xth,] when Mars became stationary to the west, [it became stationary] 2 [cubits] behind the four front stars [of Sagittarius]
-
- 29' [Year 151,] king Demetrius. Month VI, night of the 22nd, Mars, while moving back to the [east], Mars was [...] below β Capri[corni]
- 30' [...] 2 fingers below γ Capricorni, it came near. Night of the 25th², first part of the night, Mars was [...] below [δ Capricorni,]
- 31' [...] back to the west. Month X, night of the 4th, first part of the night, Mars was below η Piscium [...]
- 32' [...] 3½ cubits [below] β Arietis. Night of the 20th, first part of the night, Mars was [...] below α Arie[tis]
- 33' [...] first part of the night, Mars was 1½ cubits below η Tauri. Month XII, night of the 9th, first part of the night, [...]

Rev. destroyed except for a few wedges.

No. 72

BM 42777 (81-7-1, 641)

Photo: Pl. 48

Goal year: SE 199

This tablet was brought to my attention by J. Steele.

'Obv.'

1' [...] 'x' [...]

2' [...] 'x 2' x' [...]

3' [...] 'x x x x x' [...]

4' [MU-1-me-40]-KAM ¹An u ¹An 'A'-'šú LUGAL^{meš}....]

5' [...] GIŠ.K]UN' A' 4' KÙŠ' [...]

6' [...] 'x' ina ZÁLAG' GENNA e [...]

7' [...] 'x x x x' [...]

'Rev.'

I

1' [A]B 12,40 [ŠÚ na]

2' 18 ME G[E₆]

3' ZÍZ 10,30 ŠÚ na

4' 15,30' ME GE₆

5' ŠE 9 ŠÚ na

6' 14,50' ME GE₆7' MU-1-me-1,21-KAM ¹Ar LUGAL8' GU₄ 28 AN-KU₁₀ šámaš ki PAP NU IGI

9' 'in 2+x UŠ' ME 'ana ŠÚ' šámaš

Comments

The Goal year can be found from the lunar eclipse section on the reverse to be SE 199; an (invisible) solar eclipse is correct for month II. Then the second section preserved on the obverse, which contains the name of Saturn, must refer to SE 140, and the preceding section to Mercury for SE 153. I cannot read anything plausible in the Mercury section. The names of two kings An(tiochus) in line 4 fit SE 140. There are only two Normal stars which Saturn did pass during this year: θ Leonis and β Virginis. Saturn passed θ Leonis in the beginning of the year, β Virginis in month VII. The latter was probably mentioned in line 6'. My reading of line 5' is more an attempt to find what I expect than a true reading.

No. 72

'Obv.'

1' [...] [...]

2' [...] 2 [...]

3' [...] [...]

4' [Year 140, kings] Antiochus and [his] son Antiochus]

5' [... Saturn was] 4' cubits' [below θ Leo]nis' [...]

6' [...], last part of the night, Saturn was [...] above [...]

7' [...] [...]

'Rev.'

I

1' Month X, ['moonset to sunrise' (plus) 'sunrise to moonset':] 12° 40'.

2' 'moonrise to sunset' (plus) 'sunset to moonrise': 18°.

3' Month XI, 'moonset to sunrise' (plus) 'sunrise to moonset': 10° 30'.

4' 'moonrise to sunset' (plus) 'sunset to moonrise': 15° 30'.

5' Month XII, 'moonset to sunrise' (plus) 'sunrise to moonset': 9°.

6' 'moonrise to sunset' (plus) 'sunset to moonrise': 14° 50'.

7' Year 181, king Arsaces.

8' Month II, the 28th, solar eclipse; when I watched I did not see it.

9' At 2+x° before sunset.

No. 73

BM 34405 (= Sp 524)

BM 34509 (= Sp 633)

BM 35453 (= Sp II 1042)

BM 41958 (= 81-6-25,579) + 132275 (= 1958-4-12,9)

These pieces are part of the same tablet but cannot be joined; they are distributed as follows:

34405: Rev. 16-23, right part

34509: Obv. 21'-33', right part

35453: Obv. 1-11; rev. 33'-45'; upper edge

41958+: Obv. 24'-40'; rev. 1-21; left edge

Copies: LBAT 1320 (34405), 1327 (34509), 1339 (35453), 1384 (41958).
Photo: Pl. 49

Goal year: SE 201 and 202; planetary data only.

Obv.

- 1 [MU-1-me-30-KAM ¹Se LUGAL GU₄ x MÚL-BABBAR ina MAŠ-MAŠ ŠÚ SIG] 13
MÚL-BABBAR ina MAŠ-MAŠ IGI
- 2 [DU₆ MÚL-BABBAR ana NIM ki UŠ]-ú 8 SI e MÚL IGI šá ALLA
- 3 [šá ULÙ UŠ GAN x MÚL-BABBAR ana ME E-a ZÍZ MÚL-BABBAR ana ŠÚ k]i
UŠ-a 3 KÙŠ SIG MAŠ-MAŠ ár '6' U¹ ana NIM DIB UŠ
- 4 [MU-1-me-31-KAM SIG x MÚL-BABBAR ina ALL]A ŠÚ ŠU 25 MÚL-BABBAR ina
ALLA [IGI]
- 5 [APIN MÚL-BABBAR ana NIM k]i UŠ-ú ½ KÙŠ ina IGI MÚL [TUR]
- 6 [šá 4 KÙŠ ár LUGAL UŠ AB x MÚL-BABBAR] ana ME E-a ŠE EN 20+[x MÚL-
BABBAR ina UŠ]
- 7 [MU-1-me-18-KAM ¹An u ¹An A-šú LUGAL^{meš} ina ZÁLAG] MÚL-BABBAR SIG
MAŠ-MAŠ I[GI']
- 8 [.... MÚL-BABBAR]R ana ŠÚ ina LAL-šú S[IG']
- 9 [.... KÙŠ GE₆ 20+[x x']
- 10 [....] ina ZÁLAG M[ÚL-BABBAR x]
- 11 [....] 'x' [....]
(ca. 10 lines broken)
- 21' [....] 'x' [....]
- 22' [....] 'x' 5 [....]
- 23' [....] 'e' MAŠ-MAŠ šá SIPA 1+[x KÙŠ]
- 24' [x] 'x x' [....] 2' KÙŠ KIN 4 7 na [dele-bat]
- 25' 'in' x dele-bat ina NIM ina ABSIN' ŠÚ [APIN x dele-bat ina ŠÚ ina x IGI (....)] 8,30
na-su in 18 'IGI'
- 26' 'ZÍZ GE₆ 24' USAN' dele-bat SIG M[ÚL KUR šá DUR nu-nu nn mm ŠE GE₆] 4'
USAN dele-bat SIG MÚL IGI
- 27' 'šá SAG HUN' [x]+½' KÙŠ GE₆ 9 USA[N dele-bat SIG MÚL ár šá SAG HUN nn]
KÙŠ GE₆ 25 USAN dele-bat
- 28' SIG MÚL'-MÚL' 2' KÙŠ' DIR-ŠE GE₆ 5 U[SAN dele-bat e is le₁₀ nn mm G]E₆ 15
USAN dele-bat SIG šur GIGIR šá SI 1½ K[ÙŠ]
- 29' GE₆ '16' USAN' dele-bat e šur GIGIR šá ULÙ [nn mm GE₆ x USAN dele-ba]t e MÚL
IGI šá še-pít MAŠ-MAŠ 1½ KÙŠ
- 30' GE₆ 'x' 'USAN' dele-bat e MÚL ár šá še-pít [MAŠ-MAŠ nn mm MU-1-me-1,35-KAM]
'BAR' GE₆ 2 USAN dele-bat e MAŠ-MAŠ šá SIPA 4 KÙŠ

No. 73

Obv.

- 1 [Year 130, king Seleucus. Month II, the xth, Jupiter's last appearance in Gemini. Month
III,] the 13th, Jupiter's first appearance in Gemini.
- 2 [Month VII,, when Jupiter became stationary to the east, it became stationary] 8
fingers above θ Cancri.
- 3 [Month IX, the xth, Jupiter's acronychal rising. Month XI, when Jupiter] became
stationary [to the west,] it became stationary 3 cubits below β Geminorum, having
passed 6' fingers to the east.
- 4 [Year 131. Month III, the xth, Jupiter's] last appearance [in Can]cer. Month IV, the
25th, Jupiter's [first appearance] in Cancer.
- 5 [Month VIII,] when Jupiter became stationary [to the east, it became stationary]
½ cubit in front of ρ
- 6 [Leonis. Month X, the xth, Jupiter's] acronychal rising. Month XII, until the 20+[xth,
Jupiter became stationary in]
- 7 [Year 118, kings Antiochus and his son Antiochus last part of the night,] Jupiter
was [....] below α' Geminorum]
- 8 [.... Jupite]r, while moving back to the west, was [....] be[low']
- 9 [....] cubits'. Night of the 20+[xth,]
- 10 [....] last part of the night, J[upiter]
- 11 [....] [....]
(ca. 10 lines broken)
- 21' [....] [....]
- 22' [....] 5 [....]
- 23' [....] 1+[x cubits] above γ Geminorum.
- 24' [....] [....] 2' cubits. Month VI, the 4th, rising [of Venus] to sunrise: 7°.
- 25' [Around'] the xth, Venus' last appearance in the east' in Virgo' [Month VIII, the xth,
Venus' first appearance in the west in] sunset to setting of Venus: 8° 30'; (ideal) first
appearance on the 18th.
- 26' Month XI, night of the 24th', first part of the night, Venus was [....] below [η Piscium.
Month XII, night] of the 4th', first part of the night, Venus was [x]+½ cubits below β
- 27' Arietis. Night of the 9th, first part of the night, [Venus was nn] cubits [below α Arietis.]
Night of the 25th, first part of the night, Venus was
- 28' 2' cubits' below η Tauri. Month XII₂, night of the 5th, first [part of the night, Venus
was above α Tauri. Ni]ght of the 15th, first part of the night, Venus was 1½ cubits
below β Tauri.
- 29' Night of the 16th', first part of the night, Venus was [....] above ζ Tauri. [Night of the
xth, first part of the night, Ven]us was 1½ cubits above η Geminorum.
- 30' Night of the xth, first part of the night, Venus was [....] above μ Geminorum. Year
195,] month I, night of the 2nd, first part of the night, Venus was 4 cubits above γ
Geminorum.

- 31' MU-1-me-155¹-KAM ¹De-met-ri LUGAL [BAR x GU₄-UD ina ŠÚ ina MÚL-MÚL IGI 1]4³ na-su GE₆ 9 USAN GU₄-UD
 32' ¹e is le₁₀ 1¹ KÙŠ GE₆ 17¹ USAN [GU₄-UD SIG šur GIGIR šá SI nn mm GE₆ 1]9 USAN GU₄-UD
 33' ¹e šur¹ GIGIR² šá ULÙ¹ 1½ KÙŠ GE₆ 10+[x USAN GU₄-UD e MÚL IGI šá še-pít MAŠ-MA]Š ¹1¹ KÙŠ 4 U¹
 34' ¹GE₆ 28 USAN¹ GU₄-UD e MÚL ár [šá še-pít MAŠ-MAŠ nn mm GU₄ GE₆ x USAN GU₄-UD]
 35' ¹e¹ MAŠ-MAŠ šá SIPA 4 KÙŠ in 11+[x GU₄-UD] ina ŠÚ ina MAŠ-[MAŠ ŠÚ SIG x GU₄-UD ina NIM ina MAŠ-MAŠ IGI]
 36' ¹KUR¹ 15,30 na-su in 14 IG[I x x] 14 na G[U₄-UD x GU₄-UD ina N]IM¹ ina [x ŠÚ]
 37' [I]ZI in 5 GU₄-UD ina ŠÚ ina AB[SIN¹] IGI NU PAP in 27¹ [GU₄-UD ina ŠÚ ina x ŠÚ]
 38' [KI]N 28 GU₄-UD ina NIM ina AB[SIN IGI] KUR 16 na-su i[n x IGI DU₆ GE₆ 6¹ ina ZÁLAG GU₄-UD]
 39' [e] SA₄ šá ABSIN 2 K[ÙŠ x x] ŠÚ šá GU₄-UD ina NIM [ina x TA x ki PAP NU IGI]
 40' [GAN] ¹9¹ GU₄-UD ina ŠÚ ina [MÁŠ IGI x x] 15 na-su in [x IGI GU₄-UD ina ŠÚ ina x ŠÚ]

Rev.

- 1 [AB x GU₄]-UD ina NIM ina MÁŠ 1¹ KÙŠ ár SI MÁŠ 1 KÙŠ 8 U ana ULÙ S[IG IGI]
 2 [na-s]u in 14 IGI ZÍZ GE₆ 6¹ IGI¹ DIB¹ GE₆ 8 DIB-qa šá GU₄-U[D]
 3 [2]8 ŠÚ šá GU₄-UD ina NIM ina GU TA 26 ki PAP NU IGI
 4 [M]U-1-me-56-KAM BAR 1 GU₄-UD ina ŠÚ ina HUN IGI 14 na-su in 30 šá ŠE IGI G[E₆ x USAN]
 5 GU₄-UD SIG MÚL-MÚL 2/3 KÙŠ GE₆ 16 USAN GU₄-UD e is le₁₀ 3 KÙ[Š GU₄ x x na GU₄-UD]
 6 in 7 GU₄-UD ina ŠÚ ina TIL MÚL-MÚL ŠÚ SIG 13 GU₄-UD ina NIM ina MAŠ-MAŠ IGI 13 na-[su na]
 7 GU₄-UD in 25 GU₄-UD ina NIM ina MAŠ-MAŠ ŠÚ ŠU 24 GU₄-UD ina ŠÚ ina A 4 U SIG [dele-bat 2 U ana ŠÚ LAL IGI]
 8 TUR 15 na-su IZI 24 13 na G[U₄]-UD in 26 GU₄-UD ina ŠÚ ina ABSI[N ŠÚ KIN x GU₄-UD ina NIM]

- 31' Year 155. king Demetrius. [Month I, the xth, Mercury's first appearance in the west in Taurus] sunset to setting of Mercury: [1]4°. Night of the 9th, first part of the night, Mercury was
 32' 1 cubit above α Tauri. Night of the 17th¹, first part of the night, [Mercury was below β Tauri. Night of the 1]9th, first part of the night, Mercury was
 33' 1½ cubits above ζ Tauri. Night of the 10+[xth, first part of the night, Mercury was] 1' cubit 4 fingers [above η Geminorum.]
 34' Night of the 28th, first part of the night, Mercury was [....] above μ Ge[minorum. Month II, night of the xth, first part of the night, Mercury was]
 35' 4 cubits above γ Geminorum. Around the 11+[xth, Mercury's last appearance] in the west in Gem[ini. Month III, the xth, Mercury's first appearance in the east in Gemini;]
 36' it was bright; rising of Mercury to sunrise: 15° 30'; (ideal) first appearance on the 14th [....] rising of Mercury of sunrise: 14° [.... Mercury's last appearance in] the east¹ in [....]
 37' Month V, around the 5th, Mercury's first appearance in the west in Vir[go¹]; I did not watch. Around the 27th, [Mercury's last appearance in the west in]
 38' Month VI, the 28th, Mercury's [first appearance] in the east in Virgo; It was bright; rising of Mercury to sunrise: 16°; [(ideal) first appearance] on [the xth. Month VII, night of the 6th¹, last part of the night, Mercury was]
 39' 2 cubits [above] α Virginis. [....] Mercury's last appearance in the east [in, from the xth when I watched I did not see it.]
 40' [Month IX,] the 9th¹, Mercury's [first appearance] in the west in [Capricorn] sunset to setting of Mercury: 15°; [(ideal) first appearance] on [the xth Mercury's last appearance in the west in]

Rev.

- 1 [Month X, the xth, Mercury's first appearance] in the east in Capricorn, 1 cubit behind β Capricorni, 1 cubit 8 fingers low to the south [....]
 2 rising of Mercury to sunrise: [....]; (ideal) first appearance on the 14th. Month XI, night of the 6th¹ Night of the 8th, the passing of Mercury [....]
 3 The 28th, Mercury's last appearance in the east in Aquarius: from the 26th, when I watched I did not see it.
 4 Year 156. Month I, the 1st, Mercury's first appearance in the west in Aries; sunset to setting of Mercury: 14°; (ideal) first appearance on the 30th of month XII. Ni[ght of the xth, first part of the night,]
 5 Mercury was 2/3 cubit below η Tauri. Night of the 16th, first part of the night, Mercury was 3 cubits above α Tauri. [Month II, the xth, sunset to setting of Mercury:]
 6 Around the 7th, Mercury's last appearance in the west in the end of Taurus. Month III, the 13th, Mercury's first appearance in the east in Gemini; rising of Mercury to sunrise: 13° [.... rising of]
 7 of Mercury to sunrise: [....] Around the 25th, Mercury's last appearance in the east in Gemini. Month IV, the 24th, Mercury's [first appearance] in the west in Leo. 4 fingers below [Venus, being 2 fingers back to the west;]
 8 it was small, sunset to setting of Mercury: 15°. Month V, the 24th, sunset to setting of Mercury: 13°. Around the 26th, Mercury's [last appearance] in the east in Virgo. [Month VI, the xth, Mercury's]

- 9 *ina* ABSIN 2 KÜŠ 8 U *ár* MÚL-BABBAR *ana* NIM GUB 'IGI' KUR NIM-*a* 18,30 *na-*
s[u in x IGI]
- 10 DU₆ 12 14,30 *na* GU₄-UD *in* 17 GU₄-UD *ina* NIM *ina* RÍN ŠÚ GAN 11 GU₄-UD [*ina*
 ŠÚ *ina* TIL PA IGI KUR NIM-*a*]
- 11 14,30 *na-su in* 9 *ina* PA IGI GE₆ 20 USAN GU₄-UD SIG SI 'MÁŠ' [...]
- 12 GU₄-UD *ina* ŠÚ *ina* MÁŠ ŠÚ NU PAP AB *in* 8 GU₄-UD *ina* NIM *ina* PA IGI NU PAP
 ZÍZ GE₆ 6 [*ina* ZÁLAG GU₄-UD SIG]
- 13 SI MÁŠ 2 KÜŠ *in* 22 GU₄-UD *ina* NIM *ina* GU ŠÚ 'NU PAP' ŠE 28 GU₄-UD *ina* ŠÚ
ina HUN IGI [...]
- 14 16 *na-su in* 24 IGI DIR-ŠE GE₆ 17 U[SAN] 'GU₄-UD' SIG MÚ[L-MÚL [...]
- 15 *in* 26 GU₄-UD *ina* ŠÚ *ina* SAG MÚL-MÚL ŠÚ NU [PAP]
- 16 MU-1-me-42-KAM 'An u 'An A-šú LUGAL^{meš} G[U₄ x x GENNA *ana* ŠÚ] *ki* [UŠ-*a*
 x]+½ KÜŠ *ina* IG[I DELE šá IGI ABSIN UŠ]
- 17 ŠU GE₆ 12 USAN GENNA *ana* NIM [*ina* LAL-šú SIG DELE šá IGI ABSIN x (x x)] U
 IZI '27' ŠÚ šá GENNA *ina* ABSIN
- 18 TA 23 *ki* PAP NU IGI D[U₆ x GENNA *ina* ABSIN nn mm *ár* GU₄-UD] *ana* NIM IGI
 15²,30 *na-su*
- 19 *in* 12 IGI GAN GE₆ 4+[x *ina* ZÁLAG GENNA *e* SA₄ šá ABSIN x]+1 KÜŠ ZÍZ *in* EN
 '7' GENNA *ana* {*ina*} NIM
- 20 *ki* UŠ-^ru' [nn mm *ár* SA₄ šá ABSIN UŠ *ina*] ZÁLAG GENNA *ana* ŠÚ *ina* LAL-šú *e*
 SA₄
- 21 [šá ABS]IN 2+[x] IGI SA₄ šá ABSIN 2½ KÜ[Š]
- 22 [... š]á ABSIN 2 KÜŠ IZ[I] 'x x'
- 23 [... 'GE₆' 24+x' [...]
 (ca. 10 lines broken)
- 33' [... 'x' [...]
- 34' [... ULÙ 1½ KÜŠ [...]
- 35' [... GE₆ x US]AN AN *e* MÚL *ár* šá 'še'-p[*it* MAŠ-MAŠ]
- 36' [nn mm *e* MAŠ-MA]Š šá SIPA 4 KÜŠ
- 37' [... A]N SIG MAŠ-MAŠ IGI 3½ KÜŠ GE₆ 21 USAN AN
- 38' [... A]N' *e* MÚL *ár* šá ALLA šá ULÙ ½ KÜŠ SIG GE₆ 6
- 39' [USAN AN SIG SAG A nn mm DU₆ GE₆ x *ina*] ZÁLAG AN SIG RÍN šá ULÙ 8 U GE₆
 23 *ina* ZÁLAG AN
- 40' [SIG RÍN šá SI nn mm APIN GE₆ x *ina* ZÁLAG AN S]IG MÚL *e* šá SAG GÍR-TAB 8
 U' GE₆ 23 *ina* ZÁLAG AN

- 9 first appearance [in the east] in Virgo, it stood 2 cubits 8 fingers behind Jupiter to the
 east; it was bright (and) high, rising of Mercury to sunrise: 18° 30'; [(ideal) first
 appearance on the xth.]
- 10 Month VII, the 12th, rising of Mercury to sunrise: 14° 30'. Around the 17th, Mercury's
 last appearance in the east in Libra. Month IX, the 11th, Mercury's [first appearance
 in the west in the end of Sagittarius; it was bright (and) high,]
- 11 sunset to setting of Mercury: 14° 30'; (ideal) first appearance on the 9th in Sagittarius.
 Night of the 20th, first part of the night, Mercury was [...] below β Capricorni [...]
- 12 Mercury's last appearance in the west in Capricorn; I did not watch. Month X, around
 the 8th, Mercury's first appearance in the east in Sagittarius; I did not watch. Month
 XI, night of the 6th, [last part of the night, Mercury was]
- 13 2 cubits [below] β Capricorni. Around the 22nd, Mercury's last appearance in the east
 in Aquarius; I did not watch. Month XII, the 28th, Mercury's [first appearance in the
 west in Aries]
- 14 sunset to setting of Mercury: 16°; (ideal) first appearance on the 24th. Month XII₂,
 night of the 17th, first part of the night, Mercury was [...] below [η Tauri]
- 15 Around the 26th, Mercury's last appearance in the west in the beginning of Taurus; I
 did not [watch.]
- 16 Year 142, kings Antiochus and his son Antiochus. Mon[th II, the xth,] when [Saturn
 became stationary to the west, it became stationary x]+½ cubits in front of [γ Virginis.]
- 17 Month IV, night of the 12th, first part of the night, Saturn, [while moving back] to the
 east, was [...] fingers [below γ Virginis.] Month V, the 27th, Saturn's last appearance in
 Virgo:
- 18 from the 23rd, when I watched I did not see it. Mon[th VII, the xth, Saturn's] first
 appearance [in Virgo, behind Mercury to the east; rising of Saturn to sunrise: 15°
 30':
- 19 (ideal) first appearance on the 12th. Month XI, night of the 4+[xth, last part of the
 night, Saturn was x]+1 cubits [above α Virginis.] Month IX, around until the 7th',
 when Saturn became stationary to the east,
- 20 [it became stationary behind α Virginis] last part of the night, Saturn, while
 moving back to the west, was 2+[x cubits] above α Virginis.
- 21 [...] 2½ cubits in front of α Virginis
- 22 [...] 2 cubits [...] Virginis. Month V,
- 23 [...] Night' of the 24+xth [...]
 (ca. 10 lines broken)
- 33' [...] [...]
- 34' [...] 1½ cubits [...]
- 35' [...] Night of the xth, first] part of the night, Mars was [...] above μ Ge[minorum.]
- 36' [...] 4 cubits [above] γ Geminorum.
- 37' [...] Mars was 3½ cubits below α Geminorum. Night of the 21st, first part of the
 night, Mars was
- 38' [...] Mars was ½ cubit above δ Cancri. Month III, night of the 6th,
- 39' [first part of the night, Mars was below ε Leonis. Month VII, night of the xth,] last
 part of the night, Mars was 8 fingers below α Librae. Night of the 23rd, last part of
 the night, Mars was
- 40' [...] below β Librae. Month VIII, night of the xth, last part of the night, Mars was] 8
 fingers below β Scorpii. Night of the 23rd, last part of the night, Mars was

- 41' [e SI₄ nn mm GAN GE₆ x ina ZÁLAG AN e MÚL KUR šá K]IR šil PA ½ KÜŠ ZÍZ
GE₆ 6 ina ZÁLAG AN SIG SI MÁŠ 2½ KÜŠ
42' [... ŠE GE₆ x]+1 ina ZÁLAG AN e SUHUR ár ½ KÜŠ
43' [MU-1-me-55-KAM SIG GE₆ x ina ZÁLAG AN SIG MÚL KUR šá DUR nu]-nu 3 KÜŠ
GE₆ 14 ina ZÁLAG AN SIG MÚL IGI
44' [šá SAG HUN nn mm GE₆ x ina ZÁLAG AN SIG MÚL ár šá SAG HUN nn] 'KÜŠ' ŠU
GE₆ 22 ina ZÁLAG AN SIG MÚL-MÚL 2 KÜŠ
45' [... GE₆ x U]SAN AN ana ŠÚ ina LAL-šú e is le₁₀ 2½ KÜŠ

Upper edge

- 1 [...] 'KÜŠ' ZÍZ GE₆ 20 USAN AN
2 [... GE₆ x USAN AN e šur GIGIR šá UL]Ü 1½ KÜŠ ŠE GE₆ 13 USAN
3 [AN e MÚL IGI šá še-pít MAŠ-MAŠ nn mm GE₆ x USAN AN] 'e' MÚL ár šá še-pít
MAŠ-MAŠ
4 [nn mm]

Left edge

- 1 MU-1-me-56-KAM BAR GE₆ 12 USAN AN SIG M[AŠ-MAŠ IGI nn mm]
2 DIB-qa² 'x x x' [...]

Comments

Rev. 7: end restored from LBA *1288 (No. 74).

Rev. 10: ditto etc.

No. 74

BM 40086 + 40110 (= 81-2-1, 51+75)

Listed as LBA *1288 (40086)

Photo: Pl. 50f.

Goal year: SE 202

Very rubbed and hard to read

Obv.

- 1 [MU-1-me]-31-KAM 'Se LUGAL SIG' 10+[x]
2 [APIN] in EN 27 MÚL-BABBAR ana NIM k[i] 'UŠ-ú' [x] 'x' [...]
3 AB in 26 MÚL-BABBAR ana ME E-a 'x' [x x] 'x x' [...]
4 MU-1-me-18-KAM DIR-ŠE GE₆ '20' USAN MÚL-BABBAR x' [...]
5 MU-1-me-19-KAM 'An u 'An A-šú 'LUGAL meš' 'x' [...]
6 e LUGAL 4 SI GAN GE₆ 10' 'USAN MÚL-BABBAR x x' [...]
7 MU-1-me-30-KAM šá š-i MU-1-me-1,34'-[KAM]
8 GE₆ 8 ina ZÁLAG dele-bat SIG MÚL IGI šá SAG HUN 5' [KÜŠ]
9 SIG GE₆ 9 ina ZÁLAG dele-bat e is le₁₀ 2 [KÜŠ]
10 GE₆ 30 ina ZÁLAG dele-bat e MÚL ár šá [še-pít MAŠ-MAŠ]
11 e MAŠ-MAŠ šá SIPA 3 KÜ[š x x x] 'x x x' [...]

- 41' [... above α Scorpii. Month IX, night of the xth, last part of the night, Mars was] ½
cubit [above θ] Ophiuchi. Month XI, night of the 6th, last part of the night, Mars was
2½ cubits below β Capricorni.
42' [... Month XII, night of the x]+1st, last part of the night, Mars was ½ cubit above δ
Capricorni.
43' [Year 155. Month III, night of the xth, last part of the night, Mars was] 3 cubits
[below η Pis|cium. Night of the 14th, last part of the night, Mars was [...]] below β
44' [Arietis. Night of the xth, last part of the night, Mars was [...]] cubits [below α Arietis.]
Month IV, night of the 22nd, last part of the night, Mars was 2 cubits below η Tauri.
45' [... Night of the xth, fir|st part of the night, Mars, while moving back to the west, was
2½ cubits above α Tauri.

Upper edge

- 1 [...] cubits. Month XI, night of the 20th, first part of the night, Mars was
2 [... Night of the xth, first part of the night, Mars was] 1½ cubits [above ζ Tau]ri.
Month XII, night of the 13th, first part of the night,
3 [Mars was above η Geminorum. Night of the xth, first part of the night, Mars was
[....] above μ Geminorum.
4 [...]

Left edge

- 1 Year 156. Month I, night of the 12th, first part of the night, Mars was [...] below [α
Gemino]rum. [...]
2 passing [...]

No. 74

Obv.

- 1 [Year 1]31, king Seleucus. Month III, the 10+[xth,]
2 [Month VIII,] around until the 27th, when Jupiter became stationary to the east, [...]
.... [...]
3 Month X, around the 26th, Jupiter's acronychal rising. [...] [...]
4 Year 118, month XII₂, night of the 20th², first part of the night, Jupiter [...]
5 Year 119, kings Antiochus and his son Antiochus [...]
6 4 fingers above α Leonis. Month IX, night of the 10th², first part of the night, Jupiter
.... [...]
7 Year 130, which is year 194, [...]
8 night of the 8th, last part of the night, Venus was 5² [cubits] below β Arietis [...]
9 Month III, night of the 9th, last part of the night, Venus was 2 [cubits] above α Tauri
[...]
10 Night of the 30th, last part of the night, Venus was [...] above μ Gem[inorum]
11 3 cubits above γ Geminorum. [...] [...]

- 12 'x' na dele-bat in 7 dele-bat ina 'NIM ina' A ŠÚ 'x x APIN' 19' dele-bat ina ŠÚ ina SA[G']
- 13 [x] 'GE₆ x USAN' dele-bat SIG [x] 'x x' [x x x] 'x x x x x' [....]
- 14 [GE₆] 9 USAN dele-bat SIG MÚL ár šá SAG HUN 'x x' GE₆ 24' [USAN] 'dele-bat x x' [....]
- 15 [x] USAN dele-bat e is le₁₀ 3 KÙŠ GE₆ 16' U[SAN] 'dele-bat SIG šur GIGIR šá SI x x' [....]
- 16 [x x] USAN dele-bat e MÚL ár šá še-pit MAŠ-MAŠ 'x SI' G[E₆ x] 'USAN dele-bat e' M[ÚL]
- 17 [MU-1]-me-1,35-KAM BAR GE₆ 2' USAN dele-bat 'e MAŠ-MAŠ šá' [SIPA] '4' [KÙŠ]
- 18 M[U-1-me]-56-KAM 'De-met-ri LUGAL BAR GE₆ '8 USAN' GU₄-UD 'SIG MÚL-MÚL ½' [KÙŠ] GE₆ 16' USAN GU₄-UD [....]
- 19 'GE₆ 4' 16' na GU₄-UD in 7' GU₄-UD ina ŠÚ ina TIL MÚL-MÚL ŠÚ SIG 13 [GU₄-UD] 'ina NIM ina' MAŠ-MAŠ IGI 'GE₆ x' [....]
- 20 'in' 25 GU₄-UD ina NIM ina MAŠ-MAŠ ŠÚ ŠU 24 GU₄-UD ina ŠÚ ina A '4 SI SIG' [dele-bat 2] 'SI' ana ŠÚ LAL IGI GE₆ [....]
- 21 IZI '24' 19' na GU₄-UD in 26 GU₄-UD ina ŠÚ ina ABSIN ŠÚ KIN 20+'x' 'GU₄-UD' [ina NIM] 'ina ABSIN IGI' [....]
- 22 KUR NIM-a 14,30 na-su 'in 23' IGI DU₆ 12 14,30 na GU₄-UD 'in 17' GU₄-UD ina NIM ina [....]
- 23 GU₄-UD ina ŠÚ ina TIL PA IGI KUR 'NIM-a' 14,30 na-su in 4' IGI GE₆ '15+x USAN GU₄-UD' [....]
- 24 [in] '24' GU₄-UD 'ina ŠÚ' ina MÁŠ ŠÚ NU PAP AB in 8 GU₄-UD ina NIM ina PA IGI 'x' [....]
- 25 [x] 'x GU₄-UD ina NIM' ina GU ŠÚ NU PAP ŠE '28' GU₄-UD ina ŠÚ ina HUN IGI 'KUR' [....]
- 26 [x GE₆] '20 USAN' GU₄-UD SIG MÚL-MÚL 1 KÙŠ 5' SI in 20+'x' [....]
- 27 [MU-1-me]-'42-KAM ŠE DIR' MU-1-'me-43-KAM 'An' u 'An' A-šú 'LUGAL^{meš} BAR' 'x' [....]
- 28 [x x] 'x x x' [x] 'x x GE₆ 10' USAN' GENNA [....]
- 29 [x x] 'x x x x' 14' 'x x GE₆ 25 [....]
- 30 [x x] 'x x x' [KI]N 'in' 27' GENNA [ina x IGI]
- 31 [x x] 'x x x x' [GE₆] 18' USAN [....]
- 32 [x x] 'x x x x' [....]
- 33 [....] 'x x' [....]

- 12 rising of Venus to sunrise: Around the 7th, Venus' last appearance in the east in Leo. Month VIII', the 19th', Venus' [first appearance] in the west in the beginning' of]
- 13, night of the xth, first part of the night, Venus was below [....] [....]
- 14 [night] of the 9th, first part of the night, Venus was below α Arietis. Night of the 24th', [first part of the night,] Venus was [....]
- 15 [....] first part of the night, Venus was 3 cubits above α Tauri. Night of the 16th', first [part of the night,] Venus was below β Tauri. [....]
- 16 [....] first part of the night, Venus was x fingers above μ Geminorum. Night of the xth, first part of the night, Venus was [....] above [....]
- 17 [Year] 195. Month I, night of the 2nd', first part of the night, Venus was 4' [cubits] above γ Geminorum.
- 18 Year [1]56. king Demetrius. Month I, night of the 8th, first part of the night, Mercury was ½' [cubit] below η Tauri. Night of the 16th', first part of the night, Mercury [....]
- 19 night of the 4th, sunset to setting of Mercury: 16'. Around the 7th, Mercury's last appearance in the west in the end of Taurus. Month III, the 13th, Mercury's first appearance in the east in Gemini. Night of the xth, [....]
- 20 Around the 25th, Mercury's last appearance in the east in Gemini. Month IV, the 24th, Mercury's first appearance in the west in Leo, 4 fingers below [Venus, being 2] fingers back to the west. Night [....]
- 21 Month V, the 24th, sunset to setting of Mercury: 19'. Around the 26th, Mercury's last appearance in the west in Virgo. Month VI, the 20+xth, Mercury's first appearance [n the east] in Virgo. [....]
- 22 it was bright (and) high, rising of Mercury to sunrise: 14° 30'; (ideal) first appearance on the 23rd'. Month VII, the 12th, rising of Mercury to sunrise: 14° 30'. Around the 17th, Mercury's [last appearance] in the east in [....]
- 23 Mercury's first appearance in the west in the end of Sagittarius; it was bright (and) high, sunset to setting of Mercury: 14° 30'; (ideal) first appearance on the 4th'. Night of the 15+xth, first part of the night, Mercury [....]
- 24 [Around] the 24th', Mercury's last appearance in the west in Capricorn; I did not watch. Month X, around the 8th, Mercury's first appearance in the east in Sagittarius [....]
- 25 [....], Mercury's last appearance in the east in Aquarius; I did not watch. Month XII, the 28th, Mercury's first appearance in the west in Aries; it was bright ' [....]
- 26 [...., night] of the 20th, first part of the night, Mercury was 1 cubit 5' fingers below η Tauri. Around the 20+xth, [....]
- 27 [Year 1]42; month XII was intercalary. Year 143, kings Antiochus and his son Antiochus. Month I', [....]
- 28 [....] [....] night of the 10th', first part of the night, Saturn [....]
- 29 [....] 14' Night' of the 25th, [....]
- 30 [....] Month VI, around' the 27th, Saturn's [first appearance in ...]
- 31 [....] [Night] of the 18th', first part of the night, [....]
- 32 [....] [....]
- 33 [....] [....]

Rev.

I

- 1' [...] ME [GE₆]
 2' [APIN x] Š[Ú n]a
 3' 'x' ME GE₆
 4' [GAN x] ŠÚ na
 5' [x,]40 ME GE₆
 6' 'AB' 9 ŠÚ na
 7' 14, 'x' ME GE₆
 8' ZÍZ 8,30 ŠÚ na
 9' 12² ME GE₆
 10' ŠE 16² ŠÚ na
 11' 13² ME GE₆
 12' [MU-1]-me-1-23-KAM
 13' [DI]R-ŠE' GE₆ 29 AN-KU₁₀ šámaš
 14' '5 ÁB šá' DIB in 1,7
 15' 'GE₆ GIN'
 16' [MU-1-me-1,]'24² BAR 15
 17' [...] 'x'
 18' [...] ME NIM]-a
 19' [KIN GE₆ x AN-KU₁₀] 'šámaš'
 20' [x x x] 'x x' in 1, '18²
 21' [ME ana Š]Ú šámaš
 22' 'DU₆' GE₆ 'x' AN-KU₁₀ sin šá DIB
 23' 'in' 1,10 ME' NIM-a
 24' [ŠE GE₆ 2]8² šámaš 'AN'-KU₁₀
 25' Á 'x' ki TAB-ú
 26' [x x] 'x x x x x'
 27' [x x x] 'x x x x x'
 (rest probably blank)

II

- 1' [x x] 'x' [...]
 2' DIR-ŠE '30² [...]
 3' 10+[x] 'x' [...]
 4' 10+[x] 10² [...]
 5' 10+[x] 'x' [...]
 6' 10+'x' 'x',30 GE₆
 7' 20+[x] 16² KUR 'x' [...]
 8' MU-1-me-1,24-[KAM]
 9' BAR 30 10+[x]
 10' 14 10 UŠ ŠÚ NU PAP
 11' 15 10 UŠ 'ME'
 12' 15 30 NINDA na DIR' 'x'
 13' 16 6² GE₆
 14' 20+'x' 10,10 KUR DIR NU PAP
 15' GU₄ 1 17² na-su 'KUR₄' muš'

Rev.

I

- 1' 'moonrise to sunset' (plus) 'sunset to moonrise': [...]
 2' [Month VIII.] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 3' 'moonrise to sunset' (plus) 'sunset to moonrise':
 4' [Month IX.] 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 5' 'moonrise to sunset' (plus) 'sunset to moonrise': [x°] 40'.
 6' Month X, 'moonset to sunrise' (plus) ['sunrise to moonset':] 9°.
 7' 'moonrise to sunset' (plus) 'sunset to moonrise': 14°
 8' Month XI, 'moonset to sunrise' (plus) 'sunrise to moonset': 8° 30'.
 9' 'moonrise to sunset' (plus) 'sunset to moonrise': 12°².
 10' Month XII, 'moonset to sunrise' (plus) 'sunrise to moonset': 16°².
 11' 'moonrise to sunset' (plus) 'sunset to moonrise': 13°².
 12' [Year] 183.
 13' month XII₂, night of the the 29th, solar eclipse
 14' (after) 5 months, which was omitted. At 67°
 15' after sunset.
 16' [Year 1]84, month I, the 15th,
 17' [...]
 18' [...] after sun]rise.
 19' [Month VI, night of the xth,] solar [eclipse].
 20' [...] At 78°²
 21' [before] sunset.
 22' Month VII, night of the xth, lunar eclipse which was omitted.
 23' At 70° after sunrise.
 24' [Month XII, night of the 2]8th², solar eclipse;
 25' when it began on the side,
 26' [...]
 27' [...]

II

- 1' [...]
 2' Month XII₂, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]
 3' The 10+[xth,]
 4' The 10+[xth,] 10² [...]
 5' The 10+[xth,]
 6' The 10+[xth,] sunset to moonrise: x° 30'.
 7' The 20+[xth,] moonrise to sunrise: 16°² [...]
 8' Year 184.
 9' Month I, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 10+[x°]
 10' The 14th. moonset to sunrise: 10°: I did not watch.
 11' The 15th. moonrise to sunset: 10°.
 12' The 15th. sunrise to moonset: 30': clouds.
 13' The 16th. sunset to moonrise: 6°².
 14' The 20+[xth,] moonrise to sunrise: 10° 10'; clouds, I did not watch.
 15' Month II, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 17°²; it was bright, measured.

16'	14	1,40	ŠÚ 'x x'
17'	15	2	ME
18'	15	9	na 'muš ²
19'	16	14	GE ₆ 'x x'
20'	27	8	KUR DIR ² muš ²
21'			'x x x'
22'	SIG 1	17 na-su KUR ₄ a-pir 'muš ²	
23'	[13]	'5 ² , 10 ²	ŠÚ muš
24'	[14]	'8 ¹	ME a-'kam muš
25'	14	[x,]30	na a-kam muš
26'	15	[x]	GE ₆ a-kam muš
27'	26	20+[x]	KUR muš
28'	ŠU 1	18 n[a-su] 'x x x'	
29'	12	15 ² , 30	[ŠÚ]
30'	13	'6 ¹	n[a]
31'	14	20 NINDA	ME 'x' [...]
32'	15	'13 ² , 140	GE ₆ [...]
33'	26	14 ²	KUR muš [...]

III

1'	'12	x'	[ŠÚ]
2'	13	7 ² , 20 ²	[ME]
3'	13	6	na [...]
4'	14	2 ² , 30 ²	'GE ₆ ¹ [...]
5'	28	'14+x'	KUR muš
6'	DU ₆ 1	20 'x x x'	
7'			'x x x'
8'	'12 ²	9 ² , 20 ²	ME ² NU PAP ¹
9'	'12 ²	x	ŠÚ ² x'
10'	'13	x	GE ₆ ² x'
11'	'13 ²	x	na ² x'
12'	'27 ²	10+x	KUR x'
13'	'APIN	x x x x'	
14'			'ana šámaš ¹ N[IM]
15'	12	10+'x', 30	ŠÚ ² 'x'
16'	13	4,40	'ME x'
17'	13	4, 'x'	'na x'
18'	14	'x x	GE ₆ x x'
19'	20+[x x]	'x	KUR x'

IV

1'	14	[...]
2'	15 ²	'x' [...]
3'	15	10, 20 ² [...]

16'	The 14th,	moonset to sunrise:1° 40';
17'	The 15th,	moonrise to sunset: 2°.
18'	The 15th,	sunrise to moonset: 9°; measured.
19'	The 16th,	sunset to moonrise: 14°;
20'	The 27th,	moonrise to sunrise: 8°; measured (despite) clouds.
21'		....
22'	Month III, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 17°; it was bright, earthshine, measured ² .	
23'	[The 13th,]	moonset to sunrise: 5° ² 10 ² ; measured.
24'	[The 14th,]	moonrise to sunset: 8°; measured (despite) mist.
25'	The 14th,	sunrise to moonset: [x°] 30'; measured (despite) mist.
26'	The 15th,	sunset to moonrise: [x°]; measured (despite) mist.
27'	The 26th,	moonrise to sunrise: 20+[x°]; measured.
28'	Month IV, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 18°;	
29'	The 12th,	[moonset to sunrise:] 15° ² 30' [...]
30'	The 13th,	sunrise to moonset: 6°; [...]
31'	The 14th,	moonrise to sunset: 20°; [...]
32'	The 15th,	sunset to moonrise: 13° ² 40'; [...]
33'	The 26th,	moonrise to sunrise: 14° ² ; measured.

III

1'	The 12th,	[moonset to sunrise:] x° .
2'	The 13th,	[moonrise to sunset:] $7^{\circ?} 20'^{?}$ [...]
3'	The 13th,	sunrise to moonset: 6° ; [...]
4'	The 14th,	sunset to moonrise: $2^{\circ?} 30'^{?}$; [...]
5'	The 28th,	moonrise to sunrise: $14+x^{\circ}$; measured.
6'	Month VII, the 1st (of which followed the 30th of the preceding month,) [sunset to moonset:] 20° ;	
7'		....
8'	The 12th [?]	moonrise to sunset [?] : $9^{\circ?} 20'^{?}$; I did not watch.
9'	The 12th [?] ,	moonset to sunrise [?] : x° ;
10'	The 13th,	sunrise to moonset [?] : x° ; ...
11'	The 13th [?] ,	sunrise to moonset [?] :
12'	The 27th [?] ,	moonrise to sunrise: $10+x^{\circ}$;
13'	Month VIII,	
14'		[it was hi]gh [?] to the sun [?] .
15'	The 12th,	moonset to sunrise: $10+x^{\circ} 30'$;
16'	The 13th,	moonrise to sunset: $4^{\circ} 40'$;
17'	The 13th,	sunrise to moonset: $4^{\circ?} x'$;
18'	The 14th,	sunset to moonrise:
19'	The 20+[xth,]	moonrise to sunrise:

IV

1'	The 14th. [...]
2'	The 15th ¹ , ... [...]
3'	The 15th, [...] 10° 20' ¹ [...]

- 4' 28 9 [....]
 5' 'x x 14' x' [....]
 6' 10+[x] 4' [....]
 7' 10+[x] 'x' [....]

Colophon (under col. II)

- 1: [U₄]-I-KAM IGI-DUH-A^{meš} DIB-q[a^{meš}]
 2 [....] kun-[nu-u']

Comments

Obv. 19: Computation yields II 4 for last appearance.

20: statement about first appearance in the west restored from Diary No. -155A:14.

27: This anomalous date will be discussed in a forthcoming article by G. R. F. Assar.

30: VI 27 is given as date for Saturn's first appearance in Diary No. -168B:9'.

Rev. I 16'-18': lunar eclipse of -127 May 2.

I 22'f.: lunar eclipse of -127 Oct 25.

I 24'ff.: solar eclipse of -126 Apr 6.

No. 75

BM 45993

Photo: Pl. 50f.

Goal year: SE 205

'Obv.'

- 1' [....] 'GE₆ 20 ina ZÁLAG MÚL-BABBAR' [....]
 2' [....] 'x x' šá' 'x ½ KÙŠ' x x' [....]
-
- 3' [MU-1-me-1,37-K]AM 'Ar-šá-ka-a LUGAL GU₄ GE₆ 12 ina ZÁ[LAG]
 4' [....] 'x x' GE₆ 14' ina ZÁLAG dele-bat SIG MÚL ár šá SAG HUN 5½ KÙŠ G[E₆]
 5' [....] 'ina ZÁLAG' dele-bat e is le₁₀ 1 2/3 KÙŠ ŠU GE₆ 6 ina ZÁLAG dele-bat SIG šur GIGIR šá [SI]
 6' [....] 'GE₆ 15¹¹ ina ZÁLAG dele-bat e MÚL IGI šá še-pit MAŠ-MAŠ 4 U GE₆ 18 'ina ZÁLAG' [....]
 7' [....] dele-bat 'e' MAŠ-MAŠ šá SIPA 3 KÙŠ GE₆ 20 ina ZÁLAG dele-bat SIG MAŠ-MAŠ IGI '4¹¹ [KÙŠ]
 8' [....] 'x' ina ZÁLAG dele-bat e MÚL ár šá ALLA šá ULÙ 2 SI GE₆ 24+[x]
 9' [....] 'x KIN' GE₆ 9 ina ZÁLAG dele-bat e MÚL TUR šá 4 KÙŠ ár LUGAL 8' S[I]
 10' [.... x]+5 ina ZÁLAG dele-bat e GÌR ár šá A 6 U DU₆ 'GE₆ 5' ina ZÁLAG dele-bat' [....]
 11' [.... x]+'5 10 UŠ' na dele-bat in 20 dele-bat ina NIM ina GÍR-TAB ŠÚ ZÍZ 1 dele-bat [ina ŠÚ ina x IGI]
 12' [....] USAN dele-bat SIG MÚL 'IGI¹¹ šá SAG HUN '4¹¹ KÙŠ GE₆ 16 U[SAN]
 13' [.... SIG] 'MÚL-MÚL x KÙŠ' GE₆ 21 USAN dele-bat e 'is' l[e₁₀] 'x x'

- 4' The 28th, [moonrise to sunrise:] 9° [....]
 5' 14' [....]
 6' The 10+[xth,] 4° [....]
 7' The 10+[xth,] [....]

Colophon (under col. II)

- 1 First days, appearances, passings, [....]
 2 [which] were established [....]

No. 75

'Obv.'

- 1' [....] 'Night of the 20th, last part of the night, Jupiter [....] [....]
 2' [....] ½ cubit' [....]
-
- 3' [Year 197,] king Arsaces. Month II, night of the 12th, last part of the night, [....]
 4' [....] Night of the 14th, last part of the night, Venus was 5½ cubits below α Arietis. Ni[ght]
 5' [....] last part of the night, Venus was 1 2/3 cubits above α Tauri. Month IV, night of the 6th, last part of the night, Venus was [....] below β Tauri [....]
 6' [....] Night of the 15th¹, last part of the night, Venus was 4 fingers above η Geminorum. Night of the 18th, last part of the night, [....]
 7' [....] Venus was 3 cubits above γ Geminorum. Night of the 20th, last part of the night, Venus was 4² [cubits] below α Geminorum. [....]
 8' [....], last part of the night, Venus was 2 fingers above δ Cancrī. Night of the 24+[xth]
 9' [....] Month VI, night of the 9th, last part of the night, Venus was 8¹ fingers above ρ Leonis [....]
 10' [.... Night of the x]+5th, last part of the night, Venus was 6 fingers above β Virginis. Month VII, night of the 5th¹, last part of the night, Venus [....]
 11' [.... the x]+5th, rising of Venus to sunrise: 10°. Around the 20th, Venus' last appearance in the east in Scorpius. Month XI, the 1st, Venus' [first appearance in the west in]
 12' [....] first part of the night, Venus was 4¹ cubits below β Arietis. Night of the 16th, first [part of the night,]
 13' [....] x cubits [below] η Tauri Night of the 21st, first part of the night, Venus was above α Tauri.

- 14' [...] SI 'x' [x] 'x'
- 15' [...] KÙŠ 4 SI *ár* AN 2½ KÙŠ [*ana*] 'NIM' DIB' x x x x x' [...]
- 16' [...] 'x' SIG 1 GU₄-UD *ina* ŠÚ *ina* 'MAŠ-MAŠ' [IGI]
- 17' [...] 'GU₄-UD' *ina* 'x' [...]
- 18' [...] 'x' *na* 'GU₄-U[D]

'Rev.'

(traces only of Lunar Six)

Comments

2': I cannot make sense of the traces.

3': On II 12, Venus passed η Piscium.

6': On IV 18, Venus passed μ Geminorum.

12': On XII 16, Venus passed η Piscium.

No. 76

BM 41571 (= 81-6-25, 185) + 42057 (81-6-25, 679) + Rm 778

Copies: LBA 1261 (Rm 778), 1289 (41571), 1290 (42057)

Photo: Pl. 52

Goal year: SE 205-206

Upper edge

- 2 *ina a-mat* dEN u d[GASAN-*ia* liš-lim]

Obv.'

- 1 [MU-1-me-3]⁴ KAM ¹Se LUGAL GU₄ EN 15 MÚL-BABBAR *ana* ŠÚ *ki-i* U]Š-a 1 KÙŠ 4 SI 8 SI *ár* SA₄ šá ABSIN 1½ KÙŠ *ana* SI NIM UŠ
- 2 [KIN 2]8' MÚL-BABBAR *ina* RÍN ŠÚ NU PAP APIN 1 MÚL-BABBAR [*ina* R]ÍN IGI 10 UŠ *na-su in* 30 šá DU₆ IGI ŠE *in* EN 3
- 3 [MÚL-BABBAR *ana*] NIM *ki-i* UŠ-ú 1½ KÙŠ *ár* MÚL e š[á] SAG GÍR-TAB UŠ ŠE DIR
- 4 [MU-1-me-3]5-KAM ¹Se LUGAL BAR *in* 3 MÚL-BABBAR *ana* ME E-¹a' GU₄ EN 27 MÚL-BABBAR *ana* ŠÚ *ki-i* UŠ-a 3½ KÙŠ
- 5 [*ina* IGI MÚL x šá] SAG GÍR-TAB UŠ DU₆ '12 MÚL-BABBAR' [*ina* G]ÍR-TAB ŠÚ NU PAP APIN 13 MÚL-BABBAR *ina* GÍR-TAB IGI 11 *na-su*
- 6 [*in* x] IGI ŠE *in* E[N 2]2' MÚL-BABBAR [*ana* NIM *ki-i* UŠ-ú *ina*] IGI 4-ÀM *ár*^{me} 'šá' [PA UŠ]

- 14' [...] fingers'

- 15' [...] cubit 4 fingers, having passed 2½ cubits behind Mars to the east [...]
- 16' [...] Month III, the 1st, Mercury's [first appearance] in the west in Gemini [...]
- 17' [...] Mercury's [...] in [...]
- 18' [...] visibility of Mercury [...]

'Rev.'

(traces only of Lunar Six)

Date

The text is from the Arsacid era (l. 3'). Venus had a first appearance in the west on XI 1 (l. 11'). The only year between SE 170 and 310 coming close to this date is SE 197. A confirmation can be seen in line 15', where Mercury at some point during the first two months of the year is 2½ cubits to the east of Mars. The preceding distance can be restored as [1] cubit 4 fingers and refer to Venus which was about that far from Mercury at this time.

Unfortunately, Venus was not above, but below η Geminorum (l. 6') and δ Cancrī (l. 8') in SE 197. On the other hand, the passing of ♄ Leonis on VI 9 fits computation exactly.

No. 76

Upper edge

- 2 At the command of Bel and [Beltija may it go well.]

Obv.'

- 1 [Year 13]4, king Seleucus. Month II, until the 15th, when Jupiter became stationary to the west, it became stationary 1 cubit 4 fingers (or) 8 fingers behind α Virginis, 1½ cubits high to the north.
- 2 [Month VI', the 2]8th', Jupiter's last appearance in Libra; I did not watch. Month VIII, the 1st, Jupiter's first appearance [in Lib]ra; rising of Jupiter to sunrise: 10°; (ideal) first appearance on the 30th of month VII. Month XII, around until the 3rd, when [Jupiter] became stationary to the east, it became stationary 1½ cubits behind β Scorpīi. Month XII was intercalary.
- 4 [Year 13]5, king Seleucus. Month I, around the 3rd, Jupiter's acronychal rising. Month II, until the 27th, when Jupiter became stationary to the west, it became stationary 3½ cubits
- 5 [in front of δ/β] Scorpīi. Month VII, the 12th, Jupiter's last appearance [in] Scorpīus; I did not watch. Month VIII, the 13th, Jupiter's first appearance in Scorpīus; rising of Jupiter to sunrise: 11°;
- 6 (ideal) first appearance [on the xth.] Month XII, around until the [2]2nd', [when] Jupiter [became stationary to the east, it became stationary] in front of the four rear ones of [Sagittarius.]

- 7 [MU-1-me]-21-KAM ŠE DIR MU-1-me-22-KAM ¹A[n] 'x x' [....]
 8 [.... GE₆ x]+1 USAN MÚL-BABBAR [ana] 'NIM' ina LAL-šú e [SA₄ šá ABSIN nn mm
]
 9 [.... ina ZÁ]LAG MÚL-BABBAR S[IG RÍN šá S]I 3' ½' [KÙŠ]

'Rev.

- 1' [.... GE₆] 13 ina ZÁLAG AN e MAŠ-MAŠ šá SIPA 3½ [KÙŠ]
 2' [.... SIG M]AŠ-MAŠ ár 3 KÙŠ GE₆ 27 ina ZÁLAG AN SIG MÚL 'IGI' [šá ALL]A šá
 SI 2 [SI']
 3' [.... e MÚ]L ár šá ALLA šá ULÙ 8 U GE₆ 29 ina ZÁLAG AN S[IG] SAG A 4 KÙŠ GAN
 15 'ina x' [x UŠ]
 4' [....] USAN AN ana ŠÚ ina LAL-šú SIG SAG A 2½ KÙŠ ŠE 9 ina 15 ALLA UŠ
 5' [DIR-ŠE GE₆] '2'5' USAN AN ana NIM ina LAL-šú SIG SAG A 4' KÙŠ
 6' [(....) GE₆ x] USAN AN e LUGAL 2/3 KÙŠ

Upper edge

- 1 IGI-DUḪ-A^{meš} 'u DIB-qa^{meš} šá AN [x (x)] MU-2-me-5-KAM u MU-2-me-6-KAM

Comments

2: According to computation, Jupiter's last appearance was on VII 4; so the restoration is a guess at the nearest possible date before.

6: 'rear' stars is an error for 'front', see N. A. Roughton and G. L. Canzoneri, JHA 23 (1992) 194.

8: Jupiter's first conjunction with a Normal star after second station was with α Virginis; the date may have been III 21.

9: restoration uncertain; Jupiter did pass β Librae after first appearance.

Rev. 1': Month V fits this observation.

3': GE₆ 29 belongs to month VII.

4': one could assume that *ina* 15 ALLA means 'at 15° of Cancer' which would be approximately correct in this instance; but the other occurrence of '*ina* 15' in BM 42148 r. 3' does not fit this interpretation.

6': according to computation, Mars reached α Leonis only in month I of the following year. Since there is some blank space at the end of line 5', line 6' probably refers to the next year.

Upper edge 1: there is room for only one or two signs in the break in the middle of the line.

- 7 [Year 1]21, month XII was intercalary. Year 122, [king] An[tiochus] [....]
 8 [.... night of the x]+1st, first part of the night, Jupiter, while moving back to the east, was [....] above [α Virginis]
 9 [.... last] part of the night, Jupiter was 3' ½ [cubits] be[low β Lib]rae [....]

'Rev.

- 1' [.... night of the] 13th, last part of the night, Mars was 3½ [cubits] above γ Geminorum [....]
 2' [....] 3 cubits [below] β Geminorum. Night of the 27th, last part of the night, Mars was 2 [fingers] below η Cancrī [....]
 3' [....] 8 fingers [above] δ Cancrī. Night of the 29th, last part of the night, Mars was 4 cubits bel[ow] ε Leonis. Month IX, the 15th, [it became stationary?] in [....]
 4' [....] first part of the night, Mars, while moving back to the west, was 2½ cubits below ε Leonis. Month XII, the 9th, it became stationary on the right of Cancer.
 5' [Month XII₂, night] of the 25th², first part of the night, Mars, while moving back to the east, was 4' cubits below ε Leonis.
 6' [(....) night of the xth,] first part of the night, Mars was 2/3 cubit below α Leonis.

Upper edge

- 1 Appearances and passings of Mars' [....] year 205 and year 206.

Date

The two Jupiter sections both concern Greek-letter phenomena, and the sequence of the preserved data suggests that they are from two consecutive years. If 15 in l. 4 is read correctly, and if a king Seleucus ruled in both years, the remaining possible years are 14-15, 74-75, 84-85, 134-135. The corresponding years for Mars (passings of Normal stars) would be 38-39, 98-99, 108-109, 158-159. Of these, only the last pair fits the Jupiter data, in particular the eastern station 1½ cubits to the east of β Scorpī (l. 3). No complete date is preserved for Mars; the condition that it was below ε Leonis during its retrograde movement (rev. 4') is fulfilled in SE 159.

BM 35420 (= Sp II 1007)

Copy: LBA 1291

Photo: Pl. 53f.

Bibliography: L. Brack-Bernsen, SEAC 5th (1999) 24

Goal year: SE 207

Obv.

- 1 [...] *ki-i* UŠ-a 3-šú¹ ½ KÙŠ ár MÚL [KUR šá KIR₄ šil PA UŠ]
 2 [...] x]+1 KÙŠ ár *dele-bat* IGI KUR NIM-a 11 *na-[su]*
-
- 3 [...] 'x' [...] MÚL-BABBAR SIG SI MÁŠ 2 KÙŠ
-
- 4 [MU-1]-*me-1*.39-KAM ¹*Ar-šá-kam* LUGAL 'x' [x x x x] 'x x *dele-bat* ina NIM' ina
 MÁŠ-MAŠ ŠÚ
 5 [...] IGI 8 *na-su in* 24 IGI DU₆ GE₆ 15 USAN *dele-bat* 'x' [x x] 'KÙŠ¹ SI₄ NU IGI GE₆
 24
 6 [USAN *dele-bat* x MÚL KUR] 'šá' KIR₄ šil PA 2 SI MÚL KUR NU IGI GAN 'GE₆' 2'
 USAN *dele-bat* SIG SI MÁŠ 3 KÙŠ GE₆ 16 USAN *dele-bat*
 7 [...] SI GE₆ 18 USAN *dele-bat* SIG MÚL [ár šá SUḪU]R MÁŠ '5¹ SI ZÍZ GE₆ 12
 USAN *dele-bat* SIG MÚL KUR
 8 [šá DUR *nu-nu* nn mm G]E₆ 18 USAN *dele-bat* SIG MÚL IGI šá SAG ḪUN 3 KÙŠ
 GE₆ 22 USAN *dele-bat* SIG MÚL ár šá SAG ḪUN
 9 [...] USAN *dele-bat e* MÚL-MÚL 1 SI TE DIR-ŠE GE₆ 1 USAN *dele-bat e is le₁₀* 4½
 KÙŠ
-
- 10 [MU-1]-*me-1-šu-1*-KAM ¹*met-De-ri* LUGAL BAR 21 GU₄-UD ina ŠÚ ina MÚL-MÚL 1
 KÙŠ ár *dele-bat* ana NIM GUB 8 SI ana SI NIM IGI
 11 [...] *n*]-*a-su in* 19 IGI GE₆ 26 USAN GU₄-UD SIG šur GIGIR šá SI 1 KÙŠ 4 SI GE₆ 28
 USAN GU₄-UD *e*
 12 [šur GIGIR šá ULÙ nn] KÙŠ GU₄ 20¹ GE₆ 5 USAN GU₄-UD *e* MÚL IGI šá *še-pit*
 MÁŠ-MAŠ 2 KÙŠ GE₆ 7 USAN GU₄-UD *e* MÚL ár
 13 [šá *še-pit* MÁŠ-MAŠ nn mm] GE₆ 10 USAN GU₄-UD *e* MÁŠ-MAŠ šá SIPA 4½ KÙŠ
 GE₆ 20 U[SA]N GU₄-UD SIG MÁŠ-MAŠ IGI 4 KÙŠ GE₆ 23
 14 [USAN GU₄-UD SIG MÁŠ]-MÁŠ ár 4 KÙŠ SIG 2 ŠÚ šá GU₄-UD ina ŠÚ ina TIL
 MÁŠ-MAŠ TA 28 šá [GU₄ *ki* PA]P NU IGI ŠU 1 GU₄-UD ina NIM ina MÁŠ-MAŠ
 15 [...] KÙŠ ana ULÙ SIG IGI KUR 17 *na-su in* 27 šá SIG [IGI GE₆ x ina ZÁLAG G]U₄-
 UD SIG MÁŠ-MAŠ IGI 5½ KÙŠ
 16 [...] SIG] MÁŠ-MAŠ ár 4 KÙŠ 13 15¹ *na šá* GU₄-UD in 16 GU₄-U[D ina NIM ina x ŠÚ
 IZI' *i*]n 25 GU₄-UD ina ŠÚ

Obv.

- 1 [...] when [Jupiter] became stationary [to the west, it became stationary] 3½ cubits
 behind [θ Ophiuchi]
 2 [...] Jupiter's] first appearance [...] x]+1 cubits behind Venus; it was bright (and) high,
 rising of Jupiter to sunrise: 11° [...]
-
- 3 [...] Jupiter was 2 cubits below β Capricorni.
-
- 4 [Year 1]99, king Arsaces. [...] Venus' last appearance in the east in Gemini.
 5 [...] first appearance [in the west] sunset to setting of Venus: 8°; (ideal) first
 appearance on the 24th. Month VII, night of the 15th, first part of the night, Venus
 was [...]; I did not see α Scorpii. Night of the 24th,
 6 [first part of the night, Venus was] 2 fingers [...] θ Ophiuchi; I did not see θ. Month
 IX, night of the 2nd, first part of the night, Venus was 3 cubits below β Capricorni.
 Night of the 16th, first part of the night, Venus was
 7 [...] fingers [...] Night of the 18th, first part of the night, Venus was 5' fingers below
 δ Capricorni. Month XI, night of the 12th, first part of the night, Venus was [...]
 below η
 8 [Piscium. Ni]ght of the 18th, first part of the night, Venus was 3 cubits below β
 Arietis. Night of the 22nd, first part of the night, Venus was [...] below α Arietis.
 9 [...] first] part of the night, Venus was 1 finger above η Tauri; it came close. Month
 XII₂, night of the 1st, first part of the night, Venus was 4½ cubits above α Tauri.
-
- 10 [Year 161,] king Demetrius. Month I, the 21st, Mercury's first appearance in the west
 in Taurus, it stood 1 cubit behind Venus to the east, being 8 fingers high to the north;
 11 sunset to setting of Mercury: [...]; (ideal) first appearance on the 19th. Night of the
 26th, first part of the night, Mercury was 1 cubit 4 fingers below β Tauri. Night of the
 28th, first part of the night, Mercury was
 12 [nn] cubits above [ζ Tauri.] Month II, ..., night of the 5th, first part of the night,
 Mercury was 2 cubits above η Geminorum. Night of the 7th, first part of the night,
 Mercury was [...] above μ
 13 [Geminorum.] Night of the 10th, first part of the night, Mercury was 4½ cubits above
 γ Geminorum. Night of the 20th, first part of the night, Mercury was 4 cubits below α
 Geminorum. Night of the 23rd,
 14 [first part of the night, Mercury was] 4 cubits [below] β Geminorum. Month III, the
 2nd, Mercury's last appearance in the west in the end of Gemini: from the 28th of
 [month II, when I wat]ched I did not see it. Month IV, the 1st, Mercury's first appearance
 in the east in Gemini.
 15 [...] cubits low to the south; it was bright, rising of Mercury to sunrise: 17°; [(ideal)
 first appearance] on the 27th of month III. [Night of the xth, last part of the night,]
 Mercury was 5½ cubits below α Geminorum.
 16 [...] 4 cubits [below] β Geminorum. The 13th, rising of Mercury to sunrise: 15°. Around
 the 16th, Mer[cury's last appearance in the east in Month V¹,] around the 25th,
 Mercury's [first appearance] in the west

- 17 [UD-DA IGI] 'DIB¹ 20+'x¹ GU₄-UD *ina* ŠÚ UD-DA ŠÚ-šú DIB DU₆ 14 GU₄-UD *ina* NIM *ina* [x IGI (x) x na]-su *in* 13 IGI
- 18 [... GU₄-U]D *ina* NIM *ina* GÍR-TAB ŠÚ DIR NU PAP AB 1 GU₄-UD *ina* ŠÚ *ina* MÁŠ 1 2/3 KÜŠ *ár* 'x¹ [(x) IGI x n]a-su *in* 28
- 19 [šá GAN IGI x G]U₄-UD *ina* ŠÚ *ina* GU ŠÚ DIR NU PAP ZÍZ 4 GU₄-UD *ina* NIM *ina* MÁŠ IGI DIR NU PAP GE₆ 18 *ina* ZÁLAG [GU₄]-UD *e* MÚL IGI
- 20 [šá SUḪUR MÁŠ nn mm G]E₆ 20 *ina* ZÁLAG GU₄-UD *e* MÚL *ár* šá SUḪUR MÁŠ 1 KÜŠ ŠE 7 16 *na* GU₄-UD [*in* x G]U₄-U[D] 'x x¹ [...]
-
- 21 [MU-1-me-48-KAM ¹An LUG]AL GU₄ GE₆ 16 *ina* ZÁLAG GENNA *ana* ŠÚ *ina* LAL-šú *e* MÚL KUR šá KIR₄ šil PA 1 KÜŠ *in* 19 GENNA *ana* ME E-[a] 'ŠU¹ 26¹
- 22 [... *ana*] ŠÚ *ki-i* UŠ-a 2 'KÜŠ² 6² SI *ina* IGI MÚL KUR šá KIR₄ šil PA UŠ DU₆ GE₆ 8 USAN GENNA *ana* NIM *ina* LAL-šú *e* šil PA 1 KÜŠ 6 SI
- 23 [...] *ina* GÍR-TAB TA 11 *ki* PAP NU IGI GAN 21 GENNA *ina* SAG PA 2½ KÜŠ *ár* MÚL KUR šá KIR₄ šil PA IGI KUR NIM-a
- 24 [...] 'IGI DIR-ŠE EN 17 GENNA *ana* NIM *ki-i* UŠ-ú 1 KÜŠ *ár* 4-ÀM IGI^{meš} šá PA UŠ
-
- 25 [MU-1-me-28-KAM ¹Se LUGAL API]N¹ 5 18 *na* AN *in* 11 AN *ina* GÍR-TAB ŠÚ GU₄ 28 *ina* MÚL-MÚL IGI 18 *na* *ina* 20+'x¹ 'IGI'
-
- 26 [MU-1-me-1-šú-KAM ¹De-met-ri LUGAL BAR] '30¹ GE₆ 15 USAN AN *e* LUGAL 2/3 KÜŠ GE₆ 28 USAN AN *e* MÚL TUR šá 4 KÜŠ
- 27 [*ár* LUGAL nn mm USA]N AN SIG GIŠ.KUN A 4½ KÜŠ SIG 1 GE₆ 7 USAN AN *e* GÍR *ár* šá A 2 SI
- 28 [... SIG DELE šá IGI A]BSIN 1 KÜŠ GE₆ 20 USAN AN *e* SA₄ šá ABSIN 1 KÜŠ IZI 1 GE₆ 22
- 29 [... US]AN AN SIG RÍN šá SI 3½ KÜŠ GE₆ 21 USAN AN *e* MÚL MURUB₄ šá S[AG G]ÍR-TA[B nn mm]
- 30 [...] 'x 18¹ *na* AN *in* 20 *ina* SAG PA ŠÚ SIG 1 AN *ina* MÚL-MÚL I[GI]

- 17 [...], omitted. The 20+xth, Mercury's last appearance in the west ..., omitted. Month VII, the 14th, Mercury's [first appearance] in the east in [...]; rising of Mercury to sunrise: [...]; (ideal) first appearance on the 13th.
- 18 [... Mer]cury's last appearance in the east in Scorpius; clouds, I did not watch. Month X, the 1st, Mercury's [first appearance] in the west in Capricorn, 1 2/3 cubits behind [...]; sunset to setting of Mercury: [...]; (ideal) first appearance] on the 28th
- 19 [of month IX. The xth,] Mercury's last appearance in the west in Aquarius; clouds, I did not watch. Month XI, the 4th, Mercury's first appearance in the east in Capricorn; clouds, I did not watch. Night of the 18th, last part of the night, Mercury was [...]
- 20 [Capricorni. Ni]ght of the 20th, last part of the night, Mercury was 1 cubit above δ Capricorni. Month XII, the 7th, rising of Mercury to sunrise: 16°. [Around the xth,] Mercury's [last appearance]
-
- 21 [Year 148,] king [Antiochus.] Month II, night of the 16th, last part of the night, Saturn, while moving back to the west, was 1 cubit above θ Ophiuchi. Around the 19th, Saturn's acronychal rising. Month IV², the 26th²,
- 22 when [Saturn] became stationary to the west, it became stationary 2 cubits 6² fingers in front of θ Ophiuchi. Month VII, night of the 8th, first part of the night, Saturn, while moving back to the east, was 1 cubit 6 fingers above θ Ophiuchi.
- 23 [... Saturn's last appearance] in Scorpius: from the 11th, when I watched I did not see it. Month IX, the 21st, Saturn's first appearance in the beginning of Sagittarius, 2½ cubits behind θ Ophiuchi; it was bright (and) high,
- 24 [...] (ideal) first appearance [...] Month XII₂, until the 17th, when Saturn became stationary to the east, it became stationary 1 cubit behind the 4 front stars of Sagittarius.
-
- 25 [Year 128, king Seleucus. Mon]th VIII², the 5th, sunset to setting of Mars: 18°. Around the 11th, Mars' last appearance in Scorpius. Month II, the 28th, first appearance in Taurus; rising of Mars to sunrise: 18°; (ideal) first appearance on the 20+xth².
-
- 26 [Year 160, king Demetrius. Month I,] (the 1st of which was identical with) the 30th (of the preceding month). Night of the 15th, first part of the night, Mars was 2/3 cubit above α Leonis. Night of the 28th, first part of the night, Mars was [...] above ρ
- 27 [Leonis first part of the] night, Mars was 4½ cubits below θ Leonis. Month III, the 1st (of which followed the 30th of the preceding month). Night of the 7th, first part of the night, Mars was 2 fingers above β Virginis.
- 28 [...] 1 cubit [below γ] Virginis. Night of the 20th, first part of the night, Mars was 1 cubit above α Virginis. Month V, the 1st (of which followed the 30th of the preceding month). Night of the 22nd,
- 29 [... first] part of the night, Mars was 3½ cubits below β Librae. Night of the 21st, first part of the night, Mars was [...] above δ² Scorpii.
- 30 [...] ..., sunset to setting of Mars: 18°. Around the 20th, last appearance in the beginning of Sagittarius. Month III, the 1st, Mars' 'first appearance' in Taurus.

Right edge

- 1' BAR 1 10 HUN KUR
- 2' GU₄ 1 4 MÚL-MÚL
- 3' 28 MAŠ-MAŠ KUR
- 4' SIG 30 ŠU 1
- 5' 'IZI' 1 KIN 30
- 6' '20' RÍN KUR
- 7' [D]U₆ 1 3 GÍR-TAB
- 8' 27 PA
- 9' APIN 30
- 10' 22 MÁŠ
- 11' GAN 30
- 12' 18 GU KUR?
- 13' [AB] 30 13 *zib*^[me]
- 14' [ZÍZ] 1 10 HUN 'KUR'?
- 15' [Š]E 30 13 MÚL-[MÚL]

Rev.

I (broken);

II

- 1 [....] 'x x'
- 2 [BAR] *sin ina* DIR 'x x'
- 3 [....] DIR NU PAP
- 4 [....] 'x'
- 5 [....] 'x x' [NU] PAP
- 6 [....] NU PAP
- 7 [....] N]U PAP
- 8 [GU₄] NU PAP
- 9 [.... x],30 ŠÚ *muš*
- 10 [.... x]+10 ME [*mu*]š
- 11 [....],30 *na m[uš]*
- 12 [.... x]+10 GE₆ *muš*
- 13 [....] DIR NU PAP
- 14 [SIG] 'KUR₄' *a-pir muš*
- 15 [(....)] *ana šamáš* SIG
- 16 [x x]+1.30 ŠÚ *muš*
- 17 [x x]+2 ME *muš*
- 18 [x] 'x' *na muš*
- 19 [x x] GE₆ DIR NU PAP
- 20 [x x] KUR *muš*

Right edge

- 1' Month I, the 1st (of which followed the 30th of the preceding month); the 10th, it reached Aries.
- 2' Month II, the 1st (of which followed the 30th of the preceding month); the 4th, Taurus.
- 3' The 28th, it reached Gemini
- 4' Month III, (the 1st of which was identical with) the 30th (of the preceding month). Month IV, the 1st (of which followed the 30th of the preceding month).
- 5' Month V, the 1st (of which followed the 30th of the preceding month). Month VI, (the 1st of which was identical with) the 30th (of the preceding month).
- 6' The 20th, it reached Libra.
- 7' [Month V]II, the 1st (of which followed the 30th of the preceding month). The 3rd, Scorpius.
- 8' The 27th, Sagittarius.
- 9' Month VIII, (the 1st of which was identical with) the 30th (of the preceding month);
- 10' The 22nd, Capricorn.
- 11' Month IX, (the 1st of which was identical with) the 30th (of the preceding month);
- 12' The 18th, it reached? Aquarius.
- 13' [Month X,] (the 1st of which was identical with) the 30th (of the preceding month); the 13th, Pis[ces.]
- 14' [Month XI,] the 1st (of which followed the 30th of the preceding month); the 10th, it reached Aries.
- 15' Month XII, (the 1st of which was identical with) the 30th (of the preceding month); the 13th, Tau[rus.]

Rev.

I (broken);

II

- 1 [....]
- 2 [Month I,] the moon in clouds
- 3 [....] clouds, I did not watch.
- 4 [....]
- 5 [....] [I did not] watch.
- 6 [....] I did not watch.
- 7 [....] I did not watch.
- 8 [Month II,] I did not watch.
- 9 [....] moonset to sunrise: [x°] 30'; measured.
- 10 [....] moonrise to sunset: [.... x]+10'; [meas]ured.
- 11 [....] sunrise to moonset: [x°] 30'; meas[ured.]
- 12 [....] sunset to moonrise: [.... x]+10'; measured.
- 13 [....] clouds, I did not watch.
- 14 [Month III,] it was bright, earthshine, measured.
- 15 [....] it was low to the sun.
- 16 [....] moonset to sunrise: [x]+1° 30'; measured.
- 17 [....] moonrise to sunset: [x]+2°; measured.
- 18 [....] sunrise to moonset:; measured.
- 19 [....] sunset to moonrise: [....]; clouds, I did not watch.
- 20 [....] moonrise to sunrise: [....]; measured.

21	[ŠU x x]	na ² -su ²	KUR ₄ ¹ muš
22	[x]	x ¹	ŠÚ muš
23	[x x]+1		ME muš
24	[x x]+1		na
25	[x x]		GE ₆ ¹ muš
26	[x x]		KUR ¹ muš

III

1	IZI 30	x x ¹ [...]	
2	13	6,20	ŠÚ mu[š]
3	14	2,20	ME a-kam mu[š]
4	14	5,30	na muš
5	15	7	GE ₆ muš
6	28	10,20	KUR ki PAP NU IGI
7	KIN 1 20	na-su	KUR ₄ a-pir muš
8	ina GUB IGI	ana šamáš	SIG
9	13	6,50	ME NU PAP
10	13	3,30	ŠÚ muš
11	14	3,30	GE ₆ muš
12	14	9	na muš
13	27	16	[KUR m]uš
14	KIN-2-KAM 30 15	KUR ₄ a-kam	muš
15	ana šamáš		SIG
16	14	2	ME a-kam muš
17	14	40	NINDA ŠÚ
18	15	6	GE ₆ mu[š]
19	15	12	na muš
20	27	21	KUR KUR ₄ ² muš
21	DU ₆ 30 12	SIG a-kam	muš
22	14	7	M[E] muš
23	14	10 U[š]	ŠÚ
24	15	30 N[INDA	GE ₆]
25	15	3,20+[x	na mu]š
26	28 ²	13	KUR KUR ₄ ¹ muš

IV

1'	x ¹	[...]	
2'	15	50'	[...]
3'	27	20	KUR [...]
4'	GAN 1 20	KUR ₄ a-[pir]
5'	ina GUB IGI	ana šamáš	[x]
6'	13	14	ŠÚ x ¹

21	[Month IV,]	sunset to moonset: [...]; it was bright, measured.
22	[....]	moonset to sunrise:; measured.
23	[....]	moonrise to sunset: [x]+1°; measured.
24	[....]	sunrise to moonset: [x]+1°.
25	[....]	sunset to moonrise: [...]; measured.
26	[....]	moonrise to sunrise: [...]; measured.

III

1	Month V, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) ... [...]
2	The 13th, moonset to sunrise: 6° 20'; measured.
3	The 14th, moonrise to sunset: 2° 20'; measured (despite) mist.
4	The 14th, sunrise to moonset: 5° 30'; measured.
5	The 15th, sunset to moonrise: 7°; measured.
6	The 28th, moonrise to sunrise: 10° 20'; when I watched I did not see it.
7	Month VI, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 20°; it was bright, earthshine, measured;
8	it could be seen while (the sun) stood there; it was low to the sun.
9	The 13th, moonrise to sunset: 6° 50'; I did not watch.
10	The 13th, moonset to sunrise: 3° 30'; measured.
11	The 14th, sunset to moonrise: 3° 30'; measured.
12	The 14th, sunrise to moonset: 9°; measured.
13	The 27th, [moonrise to sunrise:] 16°; measured.
14	Month VI ₂ , (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 15°; it was bright, measured (despite) mist;
15	it was low to the sun.
16	The 14th, moonrise to sunset: 2°; measured (despite) mist.
17	The 14th, moonset to sunrise: 40'.
18	The 15th, moonrise to sunset: 6°; measured.
19	The 15th, sunrise to moonset: 12°; measured.
20	The 27th, moonrise to sunrise: 21°; it was bright ² , measured.
21	Month VII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 12°; it was faint, measured (despite) mist.
22	The 14th, moonrise to sunset: 7°; measured.
23	The 14th, moonset to sunrise: 10°.
24	The 15th, [sunset to moonrise:] 30'.
25	The 15th, [sunrise to moonset:] 3° 20+[x']; measured.
25	The 28th ² , moonrise to sunrise: 13°; it was bright, measured.

IV

1' [...]
2'	The 15th, [...] 50'.
3'	The 27th, moonrise to sunrise: 20° [...]
4'	Month IX, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 20°; it was bright, earth[shine];
5'	it could be seen while (the sun) stood there; it was [...] to the sun.
6'	The 13th, moonset to sunrise: 14°;

7'	14	8	ME DIR <i>muš</i>
8'	14	1	<i>na</i>
9'	15	3	GE ₆ <i>muš</i>
10'	27	11	KUR <i>muš</i>
11'	AB 30	11,50	DIR NU PAP
12'	14	6,10	ŠÚ DIR NU PAP
13'	15	6	ME D[IR'] 'x'
14'	15	8	<i>n[a]</i>
15'	16	9	GE ₆ DIR NU PAP
16'	27	16,50	KUR DIR NU PAP
17'	ZÍZ 1	15	<i>na-su muš</i>
18'	13	7,40	ŠÚ NU PAP
19'	14	14	ME DIR NU PAP
20'	14	4,50	<i>na</i>
21'	15	4	GE ₆ DIR NU PAP
22'	27	18	KUR <i>ki</i> PAP NU IGI
23'	ŠE 1	21	<i>na-su KUR₄ a-pir muš ina GUB IGI</i>

Colophon

- 1 [...] *a-na* MU-1-me-43-KAM *ša ši-i*
 2 [MU-2-me-7-KAM ¹*Ar-ša-kam* LUGAL] LUGAL^{meš} *kun-nu-u'*

Comments

Obv. 1: 3½ KUŠ would fit computation. There seem to be 4 partially damaged vertical wedges, with some notch at the lower end of the rightmost one which does not look like a real wedge.

15: in the first part of the line α Geminorum is to be restored; Mercury was to the west of it and much below it.

16: restoration of month name V tries to take into account modern computed dates of first and last visibility in the west: -150 Aug 20 and 25 = SE 161 V 22 and 27.

18: Mercury's first appearance in the west on X 1 was about 12° behind β Capricorni.

25 and 30: Note the reference to a first appearance in the following year.

Right edge: this section contains month lengths and the dates when a planet entered zodiacal signs. The planet in question moves through more than the whole zodiac in a year, so it is Venus or (less likely) Mercury. No entries into zodiacal signs are given for months III through V; this agrees with Venus which is invisible for more than two months between disappearance in the east and appearance in the west. The dates for entries of Venus agree approximately with SE 199 (which is the year one would expect). However, only some of the month lengths agree with the tables in PD. Also, SE 199 had a second Addaru; this may have been left out because SE 207 did not.

Rev. IV 23': the remaining Lunar Six for month XII are missing, possibly because there was a VI₂, and therefore 12 months already full.

Colophon: the restoration was suggested by G. R. F. Assar.

- 7' The 14th, moonrise to sunset: 8°; measured (despite) clouds.
 8' The 14th, sunrise to moonset: 1°.
 9' The 15th, sunset to moonrise: 3°; measured.
 10' The 27th, moonrise to sunrise: 11°; measured.
 11' Month X, (the 1st of which was identical with) the 30th (of the preceding month. sunset to moonset:) 11° 50'; clouds, I did not watch.
 12' The 14th, moonset to sunrise: 6° 10'; clouds. I did not watch.
 13' The 15th, moonrise to sunset: 6°; cl[ouds,]
 14' The 15th, sunrise to moonset: 8° [....]
 15' The 16th, sunset to moonrise: 9°; clouds, I did not watch.
 16' The 27th, moonrise to sunrise: 16° 50'; clouds, I did not watch.
 17' Month XI, the 1st (of which followed the 30th of the preceding month.) sunset to moonset: 15°; measured.
 18' The 13th, moonset to sunrise: 7° 40'; I did not watch.
 19' The 14th, moonrise to sunset: 14°; clouds, I did not watch.
 20' The 14th, sunrise to moonset: 4° 50'.
 21' The 15th, sunset to moonrise: 4°; clouds, I did not watch.
 22' The 27th, moonrise to sunrise: 18°; when I watched I did not see it.
 23' Month XII, the 1st (of which followed the 30th of the preceding month.) sunset to moonset: 21°; it was bright, earthshine, measured; it could be seen while (the sun) stood there.

Colophon

- 1 [...] were established for year 143, which is
 2 [year 207, Arsaces king of] kings.

No. 78

BM 45773 (= 81-7-6, 187)

Copy: LBA 1292

Photo: Pl. 53f.

Goal year: SE 207

'Obv.'

1' [...] '11th na-su in 1 IGI [...]2' [M]U-1-me-24-KAM 'An LUGAL ZÍZ GE₆ 29 ina ZÁLAG MÚL-BABBAR SIG S[I
MÁŠ]

3' [M]U-1-me-1,39-KAM 'Ar-ša-kam LUGAL SIG 2 9 na dele-bat [...]

4' 8 na-su in 24 IGI GAN GE₆ 2 ina ZÁLAG^{sic} dele-bat SIG SI [MÁŠ]5' [(SUḪUR) MÁŠ 4 SI GE₆ 18 USAN dele-bat SIG MÚL ár šá SUḪUR [MÁŠ]6' [...] 3 KÙŠ GE₆ 18 USAN dele-bat SIG MÚL IGI šá SAG ḪUN [...]7' [...] KÙŠ ŠE GE₆ 17 USAN dele-bat e MÚL-MÚL 1 SI TE BAR [...]

8' [...] (blank)

9' [...] 21 GU₄-UD ina ŠÚ ina M[ÚL-MÚL] 1 KÙŠ ár dele-bat ana NIM GUB '8' S[I
IGI]10' [...] 'x USANth GU₄[UD SIG šur GIGIR] šá SI 2 KÙŠ GE₆ 10+[x]11' [...] e MÚL x šá še]-pít MAŠ-MAŠ 2 KÙŠ GE₆ [...]12' [...] GE₆ 20 [...]

13' [...] 'x' [...]

14' [...] 'x' [...]

'Rev.'

I (broken);

II

1' [...] muš

2' [...] DIR NU PAP

3' [...] KUR muš

4' [...] 'x' muš

5' [...] muš

6' [...] muš

7' [...] na muš

8' 14 3 GE₆ muš9' 27 19 KUR KUR₄ muš

III

1' 15 6 GE₆ muš

2' 15 12 na muš

3' 27 20¹ KUR KUR₄² muš

No. 78

'Obv.'

1' [...] rising of Jupiter to sunrise: 11°; (ideal) first appearance on the 1st. [...]

2' Year 124, king Antiochus. Month XI, night of the 29th, last part of the night, Jupiter
was [...] below β [Capricorni.]

3' Year 199, king Arsaces. Month III, the 2nd, rising of Venus to sunrise: 9° [...]

4' sunset to setting of Venus: 8°; (ideal) first appearance on the 24th. Month IX, night of
the 2nd, last part of the night (error for: first part of the night), Venus was [...] below
β [Capricorni]5' 4 fingers [above γ Capricor]ni. Night of the 18th, first part of the night, Venus was
[...] below δ Capricor[ni]6' 3 cubits [...] Night of the 18th, first part of the night, Venus was [...] below β Arietis
[...]7' [...] cubits [...] Month XII, night of the 17th, first part of the night, Venus was 1
finger above η Tauri; it came close. Month I, [...]

8' [...] (blank)

9' [Year 161, Month I,] the 21st, Mercury's [first appearance] in the west in T[aurus,]
it stood 1 cubit behind Venus to the east, 8 fin[gers]10' [...] night of the] xth, first part of the night, Mer[cury was] 2 cubits [below] β [Tauri.]
Night of the 10+[xth,]

11' [...] 2 cubits [above η/μ] Geminorum. Night [...]

12' [...] Night of the 20th, [...]

13' [...] [...]

14' [...] [...]

'Rev.'

I (broken);

II

1' [...] measured.

2' [...] clouds, I did not watch.

3' [...] moonrise to sunrise [...]; measured.

4' [...], measured.

5' [...] measured.

6' [...] measured.

7' [The 13th,] sunrise to moonset: [...]; measured.

8' The 14th, sunset to moonrise: 3°; measured.

9' The 27th, moonrise to sunrise: 19°; it was bright, measured.

III

1' The 15th, sunset to moonrise: 6°; measured.

2' The 15th, sunrise to moonset: 12°; measured.

3' The 27th, moonrise to sunrise: 20°¹; it was bright, measured.

4'	'DU ₆ ' 30 12 SIG <i>a-kam muš</i>
5'	'14' 7 ¹ ME <i>muš</i>
6'	'14' 10 UŠŠÚ
7'	15 30 NINDA GE ₆
8'	15 '4+x, '20 <i>na muš</i>
8'	28 13 KUR KUR ₄ <i>muš</i>

IV

1'	10+[x]
2'	10+[x]
3'	27 '16 ¹ [KUR]
4'	ZÍZ 1 16 [....]
5'	13 '7 ¹ [ŠÚ]
6'	14 'x ¹ [ME]
7'	14 4 ² + [x <i>na</i>]
8'	15 [x GE ₆]
9'	20+[x x KUR]
10'	ŠE 1 [....]

Colophon

- 1 [.... IGI-DU]H-A^{meš} DIB-qa^{meš} ù AN-KU₁₀^{meš} šá *a-na* MU-1-m[e-43-KAM]
 2 [šá ší-i MU-2-me-7-KAM] '1Ar¹-[šá-kam] 'LUGAL LUGAL¹[^{meš} *kun-nu-u*]

Comments

- Obv. 2': This anomalous date will be discussed in a forthcoming article by G. R. F. Assar.
 5': According to computation, Venus was above δ Capricorni.
 7': 'Month I' at the end of the line probably began an entry on the last visibility of Venus in this month.

No. 79

BM 33457 (= Rm IV 11) + 47916 (= 81-11-3, 623)

Listed as LBA^T *1293 (33457)

Photo: Pl. 55

Goal year: SE 211

Obv.

- 1' [....] 'x x GU¹ x¹ [....]
 2' [.... x]+1 'GENNA' [*ana* NIM] *ki-i* UŠ-'ú' 2½ KÙŠ ár 'SI MÁŠ' 2 KÙŠ *ana* ULÙ [SIG UŠ]
 3' [.... GE₆] 26¹ USAN GENNA S[IG] SI MÁŠ 2½ KÙŠ IZI EN 29 GENNA *ana* ŠÚ *ki-i* UŠ-*a* [....]
 4' 'x SI MÁŠ 2½ KÙŠ *ana*¹ ULÙ SIG UŠ DU₆ GE₆ 27 U[AN] GENNA SIG SI MÁŠ 2½ KÙŠ GAN 21¹ GENNA *ina* MÁŠ ŠÚ [....]
 5' ZÍZ 1 GENNA *ina* MÁŠ IGI KUR NIM-*a* 19,30 *na-su* i[n 2]8 šá AB IGI

- 4' Month VII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 12°; it was faint, measured (despite) mist.
 5' The 14th, moonrise to sunset: 7°; measured.
 6' The 14th, moonset to sunrise: 10°.
 7' The 15th, sunset to moonrise: 30'.
 8' The 15th, sunrise to moonset: 4+x° 20'; measured.
 9' The 28th, moonrise to sunrise: 13°; it was bright, measured.

IV

- 1' The 10+[xth,]
 2' The 10+[xth,]
 3' The 27th, [moonrise to sunrise:] 16°¹ [....]
 4' Month XI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 16° [....]
 5' The 13th, [moonset to sunrise:] 7° [....]
 6' The 14th, [moonrise to sunset:] [....]
 7' The 14th, [sunrise to moonset:] 4+x° [....]
 8' The 15th, [sunset to moonrise:]
 9' The 20+xth, [moonrise to sunrise:]
 10' Month XII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) [....]

Colophon

- 1 [First days, appea]rances, passings, and eclipses which [were established] for year 1[43,]
 2 [which is year 207,] Arsaces king of kings.

No. 79

Obv.

- 1' [....] Aquarius¹ [....]
 2' [.... the x]+1st, when Saturn became stationary [to the east, it became stationary] 2½ cubits behind β Capricorni, being 2 cubits [low] to the south. [....]
 3' [.... night of the] 26th¹, first part of the night, Saturn was 2½ cubits be[low] β Capricorni. Month V, until the 29th, when Saturn became stationary to the west,
 4' it became stationary [.... β] Capricorni, being 2½ cubits low to the south. Month VII, night of the 27th, first [part of the night,] Saturn was 2½ cubits below β Capricorni. Month IX, the 21st¹, Saturn's last appearance in Capricorn [....]
 5' Month XI, the 1st, Saturn's first appearance in Capricorn; it was bright (and) high, rising of Saturn to sunrise: 19° 30'; (ideal) first appearance on [the 2]8th of month X.

- 6' MU-1-me-32-KAM ¹Se LUGAL GU₄ EN 2 AN ana ŠÚ ki-i UŠ-a 2 KÙŠ ina IGI SA₄ šá
ABSIN 2 KÙŠ ana SI NIM U[Š ŠE x]
7' 17 na AN in 15² AN ina HUN ŠÚ KIN DIR
-
- 8' MU-1-me-1-šu-4-KAM ¹A-lek-sa-an-dar LUGAL ŠU GE₆ 11+[x US]AN AN SIG RÍN
[šá U]LÛ 2/3 KÙŠ GE₆ 22+[x USAN AN]
9' SIG RÍN šá SI 4 KÙŠ IZI GE₆ 10 USAN AN SIG MÚL MURUB₄ šá [SAG GÍ]R-TAB
1 SI AN 2 [SI x x x] GE₆ 22 U[AN AN e SI₄]
10' 2² KÙŠ KIN GE₆ 10 USAN AN SIG MÚL KUR šá KIR₄ šil PA 4 SI A[N nn] SI ana
NIM DIB [APIN GE₆] 8 USA[N AN SIG SI MÁŠ]
11' 3 KÙŠ GAN GE₆ 2 USAN AN e MÚL IGI šá SUHUR MÁŠ 6 SI [AN] 2² SI ana ŠÚ
LAL [G]E₆ '5' [USAN AN] 'e' [MÚL ár šá SUHUR MÁŠ]
12' 6² SI ŠE GE₆ 2 USAN AN SIG MÚL KUR šá DUR nu-nu 2 '1/2' [K]ÙŠ GE₆ 11 USAN
AN SIG MÚL IGI [šá SAG HUN]
13' USAN AN SIG MÚL-M[ÚL] 'x' [....]

Rev.:

- 1 [MU-1-me-1],32-KAM ¹Ar-šá-kam LUGAL MU 1-me-29-KAM šá ší-i
2 MU-1-me-1,33-KAM ¹Ar-šá-[kam] LUGAL

I

- | | | |
|----|-------------------------------------|---------------------|
| 2 | [DU ₆ x] +5 ² | ŠÚ na |
| 3 | [x] +40 | ME GE ₆ |
| 4 | [APIN x] +1,30 | ŠÚ na |
| 5 | [x] +30 ² | ME GE ₆ |
| 6 | [GAN x] +5 ² | ŠÚ na |
| 7 | [x] '40 ²¹ | ME GE ₆ |
| 8 | [AB x] | ŠÚ na |
| 9 | [x] | ME GE ₆ |
| 10 | [ZÍZ x] | ŠÚ na |
| 11 | [x] | ME] GE ₆ |
| 12 | [ŠE x] | ŠÚ n]a |

II

(for lines 1f., see col. I)

- | | | |
|---|-------------------|----------------------------|
| 3 | BAR 30 15 na-su | SIG a-kam muš |
| 4 | 14 5,20 | ŠÚ DIR NU PAP |
| 5 | 15 10 UŠ | ME DIR NU PAP |
| 6 | 15 2,30+[x] | na DIR NU PAP |
| 7 | 16 8 ² | GE ₆ DIR NU PAP |
| 8 | 27 15 | KUR KUR ₄ muš |

- 6' Year 132, king Seleucus. Month II, until the 2nd, when Mars became stationary to the west, it became stationary 2 cubits in front of α Virginis, being 2 cubits high to the north. [Month XII, the xth,]
7' sunset to setting of Mars: 17°. Around the 15th², Mars' last appearance in Aries. Month VI was intercalary.
-
- 8' Year 164, king Alexander. Month IV, night of the 11+[xth, first] part of the night, Mars was 2/3 cubit below α Librae. Night of the 22+[xth, first part of the night, Mars was]
9' 4 cubits below β Librae. Month V, night of the 10th, first part of the night, Mars was 1 finger below δ [Scor]pii, Mars being 2 [fingers] Night of the 22nd, first [part of the night, Mars was]
10' 2² cubits [above α Scorpii.] Month VI, night of the 10th, first part of the night, Mars was 4 fingers below θ Ophiuchi, Mars having passed [nn] fingers to the east. [Month VIII, night of the] 8th, first part of the night, [Mars was]
11' 3 cubits [below β Capricorni]. Month IX, night of the 2nd, first part of the night, Mars was 6 fingers above γ Capricorni, [Mars] being 2² fingers back to the west. [Ni]ght of the 5th, [first part of the night, Mars was]
12' 6² fingers above [δ Capricorni.] Month XII, night of the 2nd, first part of the night, Mars was 2 1/2 cubits below η Piscium. Night of the 11th, first part of the night, Mars was [....] below β [Arietis]
13' first part of the night, Mars was below η Tauri.

Rev.:

- 1 [Year 1]92, king Arsaces. Year 129,
2 which is year 193, king Arsaces.

I

- | | | |
|----|---------------|---|
| 2 | [Month VII,] | 'moonset to sunrise' (plus) 'sunrise to moonset': [x]+5° |
| 3 | | 'moonrise to sunset' (plus) 'sunset to moonrise': [x] 40' |
| 4 | [Month VIII,] | 'moonset to sunrise' (plus) 'sunrise to moonset': [x]+1° 30' |
| 5 | | 'moonrise to sunset' (plus) 'sunset to moonrise': [x] 30' |
| 6 | [Month IX,] | 'moonset to sunrise' (plus) 'sunrise to moonset': [x]+5° ² |
| 7 | | 'moonrise to sunset' (plus) 'sunset to moonrise': [x] 40 ² |
| 8 | [Month X,] | 'moonset to sunrise' (plus) 'sunrise to moonset': [....] |
| 9 | | 'moonrise to sunset' (plus) 'sunset to moonrise': [....] |
| 10 | [Month XI,] | 'moonset to sunrise' (plus) 'sunrise to moonset': [....] |
| 11 | [| 'moonrise to sunset' (plus)] 'sunset to moonrise': [....] |
| 12 | [Month XII, | 'moonset to sunrise' (plus) 'sunrise to moonset': [....] |

II

- 3 Month I, (the 1st of which was identical with) the 30th (of the preceding month), sunset to moonset: 15°; it was faint, measured (despite) mist.
4 The 14th, moonset to sunrise: 5° 20'; clouds, I did not watch.
5 The 15th, moonrise to sunset: 10°; clouds, I did not watch.
6 The 15th, sunrise to moonset: 2° 30+[x]'; clouds, I did not watch.
7 The 16th, sunset to moonrise: 8°²; clouds, I did not watch.
8 The 27th, moonrise to sunrise: 15°; it was bright, measured.

- 9 GU₄ 1 23 *na-su* KUR₄ *a-pir*
 10 *muš ina* GUB IGI
 11 14 4 AŠ ŠÚ DIR NU PAP
 12 [15 x] 'ME¹ DIR NU PAP

III

- 1 [IZ]I 1² 19 *na-su*
 2 K[UR₄] 'a¹-*pir muš ina* GUB IGI *ana šámaš* SIG
 3 13 8 ME DIR² [NU] PAP
 4 13 7,20 ŠÚ [m]uš
 5 14 5¹ GE₆ [m]uš
 6 14 [x],30² n[a mu]š
 7 20+[x] 13² 'x¹ [mu]š
 8 KI[N] 1 19 *na-su* [x]
 9 'a¹-*pir muš ina* GUB I[GI]
 10 [x ... x]+3,40² ŠÚ *muš*
 11 [x ... x]+4 ME *muš*
 12 [x x] n[a 'x¹ [....]

IV

- 1 GAN 1 10+[x]
 2 *muš ina* [....]
 3 12 1,40² ŠÚ [....]
 4 13 4,50² ME [....]
 5 13 12² na m[uš]
 6 14 9 GE₆ *a-kam m[uš]*
 7 [2]6 20 KUR² KUR₄ *mu[š]*
 8 'AB¹ 30 'x¹ 5,30 DIR [....]
 9 12 7,40 ŠÚ DIR [....]
 10 13 12²,20 ME D[IR]
 11 13 6,20 na 'x¹ [....]
 12 1[4] 'x¹ [GE₆] 'x¹ [....]

Comments

Rev. 2: this year date is written as the second line of col. II.

IV 10: the value for ME may be 3,20.

- 9 Month II, the 1st (of which followed the 30th of the preceding month), sunset to moonset: 23°; it was bright, earthshine,
 10 measured; it could be seen while (the sun) stood there.
 11 The 14th, moonset to sunrise: 4°; clouds, I did not watch.
 12 [The 15th,] moonrise to sunset: [....]; clouds, I did not watch.

III

- 1 [Mon]th V, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 19°;
 2 it was bright, earthshine, measured; it could be seen while (the sun) stood there; it was low to the sun.
 3 The 13th, moonrise to sunset: 8°; clouds², I did [not] watch.
 4 The 13th, moonset to sunrise: 7° 20'; measured.
 5 The 14th, sunset to moonrise: 5°²; measured.
 6 The 14th, sunrise to moonset: [x°] 30'²; measured.
 7 The 20+[xth,] moonrise to sunrise: 13°²; measured.
 8 Month VI, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 19°; [....]
 9 earthshine, measured; it could be seen while (the sun) stood there [....]
 10 [The xth,] moonset to sunrise: [x]+3° 40'²; measured.
 11 [The xth,] moonrise to sunset: [x]+4°; measured.
 12 [The xth,] sunrise to [moonset:]

IV

- 1 Month IX, the 1st (of which followed the 30th of the preceding month,) [sunset to moonset:] 10+[x°;]
 2 measured; at [....]
 3 The 12th, moonset to sunrise: 1° 40'² [....]
 4 The 13th, moonrise to sunset: 4° 50'² [....]
 5 The 13th, sunrise to moonset: 12°²; mea[sured].
 6 The 14th, sunset to moonrise: 9°; mea[sured] despite mist.
 7 [The 2]6th, moonrise to sunrise: 20°; it was bright, measured.
 8 Month X, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) x+5° 30'; clouds, [....]
 9 The 12th, moonset to sunrise: 7° 40'; clouds, [....]
 10 The 13th, moonrise to sunset: 12°² 20'; cl[ouds,]
 11 The 13th, sunrise to moonset: 6° 20'; [....]
 12 The 1[4th, sunset to moonrise:] [....]

No. 80

BM 35534 (= Sp III 40)

Copy: LBAT 1342

Goal year: SE 216

Flake

- 1' [...] *na* 'dele¹-b[at²]
- 2' [...] *dele-bat* SIG SAG] A 5 KÜŠ GE₆ 17 *ina* 'ZÁLAG *dele¹-b[at* x LUGAL]
- 3' [...] MÚL TUR *ša* 4 KÜŠ *ár* LUG]AL² 3² SI KIN-2-KAM GE₆ 2 *ina* [ZÁLAG *dele-bat* SIG GIŠ.KUN A]
- 4' [...] 'x *dele-bat*¹ 2 SI *ana* NIM DIB GE₆ 10+[x]
- 5' [...] 'x KÜŠ¹ GE₆ 21¹ *ina* ZÁLAG *dele-bat* e RÍN *ša* [ULÙ]
- 6' [...] 'e¹ MÚL e *ša* SAG GÍR-TAB 5 SI G[E₆]
- 7' [...] e MÚL KUR *ša* KIR₄ *šil* P]A 1 KÜŠ GAN 27 9 *na dele-bat* i[n x *dele-bat* *ina* NIM *ina* MÁŠ ŠÚ]
- 8' [...] 'x x¹
-
- 9' [...] 'x x¹ USAN [...]
- 10' [...] 'x¹ [...]

Date

The year of the Venus data contains a month VI₂. Towards the end of month IX, Venus had its last appearance in the east. This suffices to identify this year as SE 208, and therefore the Goal year as SE 216.

No. 81

BM 35719 (= Sp III 238)

Copy: LBAT 1294

Photo: Pl. 56

Goal-year: SE 222

'Obv.'

- 1' [...] IGI 'x x x¹ [...]
- 2' [...] USA]N *dele-bat* e MÚL *ár* *ša* ALLA *ša* ULÙ 1¹/₂ KÜŠ¹ GE₆ 18¹ USAN *dele-bat* SIG [SAG A]
- 3' [...] USAN *dele-bat* e MÚL TUR *ša* 4 KÜŠ *ár* LUGAL 2/3 KÜŠ GE₆ 13 USAN [...]
- 4' [...] GÍR *ár* *ša*] 'A¹ 5¹ SI ŠU GE₆ 9 USAN *dele-bat* SIG DELE *ša* IGI ABSIN 2¹ KÜŠ GE₆ 22 USAN *de[le-bat*]

No. 80

Flake

- 1' [...] sunset to setting of Venus [...]
- 2' [...] Venus was] 5 cubits [below ε] Leonis. Night of the 17th, last part of the night, Venus [was α Leonis]
- 3' [...] 3² fingers [...] q Leonis]. Month VI₂, night of the 2nd, last [part of the night, Venus was below θ Leonis]
- 4' [...], Venus having passed 2 fingers to the east. Night of the 10+[xth,]
- 5' [...] cubits. Night of the 21st², last part of the night, Venus was [...] above α Lib[rae]
- 6' [...] 5 fingers above β Scorpii. Ni[ght]
- 7' [...] 1 cubit [above θ Ophiu]chi. Month IX, the 27th, rising of Venus to sunrise: 9°. Ar[ound the xth, Venus' last appearance in the east in Capricorn]
- 8' [...]
-
- 9' [...], first part of the night, [...]
- 10' [...] [...]

No. 81

'Obv.'

- 1' [...] [...]
- 2' [...] first part of the ni]ght, Venus was 1¹/₂ cubits above δ Cancri. Night of the 18th¹, first part of the night, Venus was [...] below [ε Leonis]
- 3' [...] first part of the night, Venus was 2/3 cubit above q Leonis. Night of the 13th, first part of the night, [...]
- 4' [...] 5¹ fingers [...] β Virgi]nis. Month IV, night of the 9th, first part of the night, Venus was 2¹ cubits below γ Virginis. Night of the 22nd, first part of the night, Ve[nus]

- 5' [...]+15 *dele-bat ina ŠÚ ina ABSIN ŠÚ KIN 15 dele-bat ina NIM ina ABSIN IGI 9 na-su in 13 IGI DU₆ 'GE₆' [...]*
- 6' [... S]I APIN GE₆ 19 *ina ZÁLAG dele-bat e RÍN šá ULÙ 1 KÜŠ GE₆ 24 ina ZÁ[LAG dele]-bat SIG RÍN šá SI 2 KÜŠ [...]*
- 7' [... *dele-bat e MÚL e šá SAG GÍR]-TAB 2/3 KÜŠ dele-bat 6 SI ana ŠÚ LAL GE₆ 13 ina ZÁLAG dele-bat e SI₄ 3½ KÜŠ GE₆ 23 ina ZÁLAG dele-bat e MÚL KUR [šá KIR₄ šil PA nn mm]*
- 8' [... SI]G SI MÁŠ 2 KÜŠ GE₆ 15 *ina ZÁLAG dele-bat e MÚL IGI šá SUḪUR MÁŠ 1 KÜŠ GE₆ 17 ina ZÁLAG dele-bat e MÚL á[r šá SUḪUR MÁŠ nn mm]*
- 9' [MU-1-me-1,16-KAM ¹A]r-šá-ka-a LUGAL BAR in 11 GU₄-UD *ina ŠÚ ina MÚL-MÚL ŠÚ DIR NU PAP GU₄ 23 GU₄-UD ina NIM ina TIL MÚL-MÚL IGI 'x' [...]*
- 10' [... 'x' 29 GU₄-UD *ina NIM ina MAŠ-MAŠ ŠÚ NU PAP ŠU 2 GU₄-UD ina ŠÚ ina A IGI 15 na-su in 1 IGI IZI in [...]*
- 11' [... KIN 1 GU₄-UD *ina NIM ina ABSIN 2 KÜŠ 8 SI ár GÍR ár šá A IGI KUR NIM-a 17 na-su in 27+[x šá IZI IGI]*
- 12' [... 'x x' GU₄-UD *ina NIM ina SAG RÍN ŠÚ APIN 19 GU₄-UD ina ŠÚ ina PA IGI 16 na-su in 18 IGI in [...]*
- 13' [... 'x x' GU₄-UD *ina NIM ina PA 'x x' ina IGI dele-bat ana ŠÚ IGI KUR 'x' na-su in 15 IGI AB GE₆ 15' [...]*
- 14' [... '5²¹ [x] 'x x x ŠE² 5²¹ GU₄-UD *ina ŠÚ ina ḪUN 3 KÜŠ SIG MÚL IGI šá SAG ḪUN IGI 'x' [...]*
- 15' [... 'SAG ḪUN' 3 KÜŠ GE₆ 9 USAN GU₄-UD SIG MÚL ár šá SAG [ḪUN nn mm]
- 16' [...] (blank)
- 17' [... 'SIG' 13 GENNA *ina SAG MAŠ-MAŠ 1 2/3 KÜŠ ár [šur GIGIR šá ULÙ IGI]*
- 18' [... MÚL IGI šá še]-pít MAŠ-MAŠ 2 SI DIM₄ KIN in EN 20+[x]
- 19' [... 'x' GENNA ana ŠÚ *ina LAL-šú SIG M[ÚL]*
- 20' [... 1½ KÜŠ ár š[ur GIGIR šá ULÙ UŠ]
- 21' [... 'x' [...]

Rev. broken

- 5' [... the x]+15th, Venus' last appearance in the west in Virgo. Month VI, the 15th, Venus' first appearance in the east in Virgo; rising of Venus to sunrise: 9°; (ideal) first appearance on the 13th. Month VII, night [...]
- 6' [... fin]gers. Month VIII, night of the 19th, last part of the night, Venus was 1 cubit above α Librae. Night of the 24th, last part of the [night, Ve]nus was 2 cubits below β Librae [...]
- 7' [... Venus was] 2/3 cubit [above β Scor]pii, Venus being 6 fingers back to the west. Night of the 13th, last part of the night, Venus was 3½ cubits above α Scorpii. Night of the 23rd, last part of the night, Venus was [...] above θ Ophi[uchi]
- 8' [...] 2 cubits below β Capricorni. Night of the 15th, last part of the night, Venus was 1 cubit above γ Capricorni. Night of the 17th, last part of the night, Venus was [...] above δ Capri[corni]
- 9' [Year 176,] king Arsaces. Month I, around the 11th, Mercury's last appearance in the west in Taurus; clouds, I did not watch. Month II, the 23rd, Mercury's first appearance in the east in the end of Taurus [...]
- 10' [...] the 29th, Mercury's last appearance in the east in Gemini; I did not watch. Month IV, the 2nd, Mercury's first appearance in the west in Leo; sunset to setting of Mercury: 15°; (ideal) first appearance on the 1st. Month V, around [...]
- 11' [...] Month VI, the 1st, Mercury's first appearance in the east in Virgo, 2 cubits 8 fingers behind β Virginis; it was bright (and) high, rising of Mercury to sunrise: 17°; [(ideal) first appearance] on the 27[+xth of month V]
- 12' [...] Mercury's last appearance in the east in the beginning of Libra. Month VIII, the 19th, Mercury's first appearance in the west in Sagittarius; sunset to setting of Mercury: 16°; (ideal) first appearance on the 18th. Around [...]
- 13' [...] the xth, Mercury's first appearance in the east in Sagittarius, in front of Venus to the west; it was bright, rising of Mercury to sunrise:; (ideal) first appearance on the 15th. Month X, night of the 15th¹, [...]
- 14' [...] 5² [...] Month XII, the 5th¹, Mercury's first appearance in the west in Aries, 3 cubits below β Arietis [...]
- 15' [...] 3 cubits [below] Arietis. Night of the 9th, first part of the night, Mercury was [...] below α Arie[tis]
- 16' [...] (blank)
- 17' [...] Month III, the 13th, Saturn's [first appearance] in the beginning of Gemini, 1 2/3 cubits behind [ζ Tauri]
- 18' [...] 2 fingers [...] η Gemi]norum, it came near. Month VI, around until the 20+[xth,]
- 19' [...], Saturn, while moving back to the west, was [...] below [...]
- 20' [...] it became stationary] 1½ cubits behind ζ [Tauri]
- 21' [...] [...]

Rev. broken

CBS 17

Listed as LBAT **1295

Photo (courtesy University Museum, Philadelphia): Pl. 57

Goal Year: SE 225

Bibliography: J. Epping - J. N. Strassmaier, ZA 6 (1891) 217-225

Upper edge

1 : *ina a-mat* ^dEN u ^dGASAN-ia *liš-lim*

Obv.:

1 MU-1-me-54-KAM ¹De-met-ri LUGAL GU₄ in 16 MÚL-BABBAR *ina* MAŠ-MAŠ ŠÚ
 'NU PAP⁷¹ SIG '18' MÚL-BABBAR' *ina* 'SAG⁷¹ ALLA 1½ KÙŠ ár GU₄-UD
 2 1½ KÙŠ *ana* SI NIM IGI 12 *na-su in* 16 IGI DU₆ *in* EN 15 MÚL-BABBAR *ana* NIM
ki UŠ-ú 2 KÙŠ ár MÚL ár šá ALLA šá ULÙ
 3 2 SI *ana* SI NIM UŠ GAN *in* 19 MÚL-BABBAR *ana* ME E-a ZÍZ EN 16 MÚL-BABBAR
ana ŠÚ *ki* UŠ-a 1' KÙŠ *ina* IGI MÚL IGI šá ALLA šá SI 8 U *ana* ULÙ SIG UŠ

4 MU-1-me-42-KAM ¹An u ¹An A-šú LUGAL^{meš} BAR GE₆ 18' USAN MÚL-BABBAR *e*
 MÚL ár šá še-pit MAŠ-MAŠ 10 SI GU₄ GE₆ 1 USAN
 5 MÚL-BABBAR *e* MAŠ<-MAŠ> šá SIPA 3½ KÙŠ ŠU GE₆ 12 USAN MÚL-BABBAR
 SIG MAŠ-MAŠ ár 3 KÙŠ KIN GE₆ 18 *ina* ZÁLAG MÚL-BABBAR SIG MÚL IGI šá
 [ALLA šá SI]
 6 2/3 KÙŠ DU₆ GE₆ 15 *ina* ZÁLAG MÚL-BABBAR *e* MÚL ár šá ALLA šá ULÙ 1 SI
 APIN GE₆ 22 *ina* ZÁLAG MÚL-BABBAR *ana* ŠÚ *ina* LAL-šú SIG [MÚL ár]
 7 šá ALLA šá ULÙ 2 SI AB GE₆ 6 USAN MÚL-BABBAR SIG MÚL IGI' šá ALLA šá SI
 10 SI

8 MU-1-me-53-KAM šá ší-i MU-2-me-17-KAM ¹Ar-šá-kam LUGAL LUGAL^{meš} BAR GE₆
 30 USAN *dele-bat e* MAŠ-MAŠ šá SIPA 3½ KÙŠ
 9 GU₄ GE₆ 9 USAN *dele-bat* SIG MAŠ-MAŠ IGI 4 KÙŠ GE₆ 13 USAN *dele-bat* SIG MAŠ-
 MAŠ ár 3 KÙŠ GE₆ 25 USAN *dele-bat e* MÚL ár šá ALLA šá ULÙ
 10 20 SI MÚL ár NU IGI SIG GE₆ 4 USAN *dele-bat* SIG SAG A 3½ KÙŠ GE₆ 11 USAN
dele-bat e LUGAL 1 KÙŠ GE₆ 18 USAN *dele-bat*
 11 *e* MÚL TUR šá 4 KÙŠ ár LUGAL 1 KÙŠ GE₆ '18' USAN *dele-bat* SIG GIŠ.KUN A
 4½ KÙŠ ŠU GE₆ 5 USAN *dele-bat e* GÌR ár [šá A]
 12 6 SI GE₆ 18 USAN *dele-bat* SIG DELE šá IGI ABSIN 1 KÙŠ GE₆ 29 USAN *dele-bat e*
 SA₄ šá ABSIN 1 KÙŠ IZI GE₆ '18' U[*dele-bat*]
 13 SIG RÍN šá ULÙ 1 KÙŠ GE₆ 23 USAN *dele-bat* SIG RÍN šá SI 4 KÙŠ KIN GE₆ 4
 USAN *dele-bat* SIG MÚL MURUB₄ šá SAG [GÍR-TAB nn mm]

Upper edge

1 At the command of Bel and Beltija, may it go well.

Obv.:

1 Year 154, king Demetrius. Month II, around the 16th, Jupiter's last appearance in
 Gemini; I did not watch. Month III, the 18th¹, Jupiter's first appearance in the beginning
 of Cancer. 1½ cubits behind Mercury.
 2 1½ cubits high to the north; rising of Jupiter to sunrise: 12°; (ideal) first appearance
 on the 16th. Month VII, around until the 15th, when Jupiter became stationary to the
 east, it became stationary 2 cubits behind δ Cancri.
 3 2 fingers high to the north. Month IX, around the 19th, Jupiter's acronychal rising.
 Month XI, until the 16th, when Jupiter became stationary to the west, it became
 stationary 1' cubit in front of η Cancri, 8 fingers low to the south.

4 Year 142, kings Antiochus and his son Antiochus. Month I, night of the 18th¹, first
 part of the night, Jupiter was 10 fingers above μ Geminorum. Month II, night of the
 1st, first part of the night,
 5 Jupiter was 3½ cubits above γ Geminorum. Month IV, night of the 12th, first part of
 the night, Jupiter was 3 cubits below β Geminorum. Month VI, night of the 18th, last
 part of the night, Jupiter was 2/3 cubit below [η] Cancri.
 6 Month VII, night of the 15th, last part of the night, Jupiter was 1 finger above δ
 Cancri. Month VIII, night of the 22nd, last part of the night, Jupiter, while moving
 back to the west, was 2 fingers below [δ]
 7 Cancri. Month X, night of the 6th, first part of the night, Jupiter was 10 fingers below
 η Cancri.

8 Year 153, which is year 217, Arsaces king of kings. Month I, night of the 30th, first
 part of the night, Venus was 3½ cubits above γ Geminorum.
 9 Month II, night of the 9th, first part of the night, Venus was 4 cubits below α
 Geminorum. Night of the 13th, first part of the night, Venus was 3 cubits below β
 Geminorum. Night of the 25th, first part of the night, Venus was 20 fingers above δ
 Cancri;
 10 I did not see δ. Month III, night of the 4th, first part of the night, Venus was 3½
 cubits below ε Leonis. Night of the 11th, first part of the night, Venus was 1 cubit
 above α Leonis. Night of the 18th, first part of the night, Venus was
 11 1 cubit above ρ Leonis. Night of the 18th¹, first part of the night, Venus was 4½ cubits
 below θ Leonis. Month IV, night of the 5th, first part of the night, Venus was 6 fingers
 above β [Virginis].
 12 Night of the 18th, first part of the night, Venus was 1 cubit below γ Virginis. Night of
 the 29th, first part of the night, Venus was 1 cubit above α Virginis. Month V, night of
 the 18th, first part of the night, [Venus was]
 13 1 cubit below α Librae. Night of the 23rd, first part of the night, Venus was 4 cubits
 below β Librae. Month VI, night of the 4th, first part of the night, Venus was [....]
 below δ Scorpii.

- 14 GE₆ 11 USAN *dele-bat e* SI₄ 20 SI GE₆ 23 USAN *dele-bat* SIG MÚL KUR šá KIR₄ šíl
PA ½' KÙŠ APIN *in* 23 *dele-bat ina* ŠÚ *ina* P[A ŠÚ]
15 DIR NU PAP *in* 27 *dele-bat ina* NIM *ina* PA IGI DIR NU PAP ZÍZ GE₆ 10 *ina*
ZÁLAG *dele-bat* SIG SI MÁŠ 1 KÙŠ GE₆ 27 *ina* ZÁLAG *dele-bat e* 'MÚL IGI'
16 šá SUḪUR MÁŠ 2 KÙŠ GE₆ 29 *ina* ZÁLAG *dele-bat e* MÚL ár šá SUḪUR MÁŠ 2 KÙŠ
-
- 17 MU-1-me-15-KAM šá ší-i MU-1-me-1,19-KAM 'Ar-šá-kam LUGAL GU₄ 8 GU₄-UD *ina*
ŠÚ *ina* MÁŠ-MÁŠ IGI KUR NIM-a 15,30 'na-su'
18 *in* 6 IGI GE₆ 14 USAN GU₄-UD SIG MÁŠ-MÁŠ IGI 3 KÙŠ GE₆ 17 USAN GU₄-UD
SIG MÁŠ-MÁŠ ár 2 KÙŠ SIG GE₆ 9 USA[N GU₄-UD]
19 SIG SAG A 'x' [x x] ŠÚ šá GU₄-UD *ina* ŠÚ *ina* TIL ALLA TA 20 *ki* PAP NU IGI ŠÚ
'16' GU₄-UD *ina* NIM *ina* ALLA 3 KÙŠ *ina* IGI *dele-bat* 1 KÙŠ *ana* [SI' NIM' IGI]
20 16 na-su [*in* x] 'IGI' IZI 4 12 na GU₄-UD *in* 5 GU₄-UD *ina* NIM *ina* A ŠÚ DU₆ 2 GU₄-
UD *ina* ŠÚ UD-DA IGI DIB 14' [GU₄-UD]
21 *ina* ŠÚ UD-DA [ŠÚ-šú DIB APIN x G]U₄-UD *ina* NIM *ina* SAG GÍR-TAB 3 KÙŠ ár
RÍN šá SI 2½ KÙŠ *ana* ULÙ SIG IGI KUR 16 na-su *in* [x]
22 šá DU₆ IGI [(APIN) GE₆ x *ina* ZÁLAG GU₄-UD] e MÚL e šá SAG GÍR-TAB 10 SI
GE₆ 19 *ina* ZÁLAG GU₄-UD e SI₄ 2 2/3 KÙŠ 'x x x' [...]
23 'x x' [...] GU₄-UD 'x x x x' [...]

'Rev.

I

- 1' *in* x 41 'GE₆ GIN'
2' IZI GE₆ 13 5 ME
3' a-kam muš 7 UŠ
4' *ina* IGI SA₄ šá mál ŠU-GI
5' ziq-pi sin AN-KU₁₀
6' Á SI u KUR *ki* TAB-ú
7' *ina* 14 GE₆ šal-šú ḪAB-rat GAR-an
8' *in* 26 GE₆ *ana* ZÁLAG
9' AB 14 AN-KU₁₀ sin 5 ÁB
10' BAR DIB *in* 25 ME *ana* ŠÚ šámaš
11' 28 AN-KU₁₀ šámaš *ki* PAP
12' NU IGI *in* 5 UŠ ME
13' *ana* ŠÚ šámaš

- 14 Night of the 11th, first part of the night, Venus was 20 fingers above α Scorpii. Night
of the 23rd, first part of the night, Venus was ½' cubit below θ Ophiuchi. Month VIII,
around the 23rd, Venus' [last appearance] in the west in Sag[ittarius];
15 clouds, I did not watch. Around the 27th, Venus' first appearance in the east in
Sagittarius; clouds, I did not watch. Month XI, night of the 10th, last part of the
night, Venus was 1 cubit below β Capricorni. Night of the 27th, last part of the night,
Venus was 2 cubits above γ
16 Capricorni. Night of the 29th, last part of the night, Venus was 2 cubits above δ
Capricorni.
-
- 17 Year 115, which is year 179, king Arsaces. Month II, the 8th, Mercury's first appearance
in the west in Gemini; it was bright (and) high, sunset to setting of Mercury: 15° 30';
18 (ideal) first appearance on the 6th. Night of the 14th, first part of the night, Mercury
was 3 cubits below α Geminorum. Night of the 17th, first part of the night, Mercury
was 2 cubits below β Geminorum. Month III, night of the 9th, first part [of the night,
Mercury was]
19 below ε Leonis. [The xth,] Mercury's last appearance in the west in the end of
Cancer: from the 20th, when I watched I did not see it. Month IV, the 16th, Mercury's
[first appearance] in the east in Cancer, 3 cubits in front of Venus, 1 cubit [high¹] to
[the north¹];
20 rising of Mercury to sunrise: 16°; (ideal) first appearance [on the xth.] Month V, the
4th, rising of Mercury to sunrise: 12°. Around the 5th, Mercury's last appearance in the
east in Leo. Month VII, the 2nd, Mercury's first appearance in the west, omitted.
The 14th¹, [Mercury's]
21 [last appearance] in the west, [omitted. Month VIII, the xth,] Mercury's first
appearance in the east in the beginning of Scorpius, 3 cubits behind β Librae, 2½
cubits low to the south; it was bright, rising of Mercury to sunrise: 16°; (ideal) first
appearance on [the xth]
22 of month VII. [(Month VIII,) night of the xth, last part of the night, Mercury was] 10
fingers above β Scorpii. Night of the 19th, last part of the night, Mercury was 2 2/3
cubits above α Scorpii [...]
23 [...] Mercury [...]

'Rev.

I

- 1' At 41° after sunset.
2' Month V, night of the 13th, moonrise to sunset: 5°;
3' measured (despite) mist. (When the point) 7°
4' in front of the bright star of the Old Man
5' culminated, lunar eclipse.
6' When it began on the north and east side,
7' in 14° of night it made one-third of the disk.
8' At 26° before sunrise.
9' Month X, the 14th, lunar eclipse (after) 5 months.
10' BAR. omitted. At 25° before sunset.
11' The 28th, solar eclipse; when I watched
12' I did not see it. At 5° before
13' sunset.

II

1'	14	5,30	<i>n[a']</i>
2'	27	12	KUR 'muš'
3'	ŠU 30	11,10	<i>na-su a-kam</i>
4'	KALAG	<i>ki</i>	PAP NU IGI
5'	13	2	ŠÚ
6'	14	30	NINDA ME
7'	14	11	<i>na muš</i>
8'	15	12,20	GE ₆ NU PAP
9'	27	20	KUR KUR ₄ <i>muš</i>

III

1'	14	'2,30	ME'
2'	14	1	ŠÚ
3'	15	5	GE ₆
4'	15	12,10	<i>na</i> DIR NU PAP
5'	27	20	KUR KUR ₄ <i>muš</i>

IV

1'	'13	10 ²¹ ,30	ŠÚ DIR NU PAP
2'	14	24	<i>na muš</i>
3'	15	1,40	ME DIR NU PAP
4'	15 ^{sic}	15,20	GE ₆ DIR NU PAP
5'	27	9	KUR SIG <i>a-kam muš</i>
6'	BAR 1	16,50	<i>na</i> DIR NU PAP

Colophon (across cols. II-IV)

1	U ₄ -1-KAM IGI-DUH-A ^{meš} DIB-qa ^{meš} u AN-KU ₁₀ ^{meš} šá ana MU-1-me-1-šu-1-KAM
2	šá ši-i MU-2-me-25-KAM ¹ Ar-šá-ka-a šá iṭ-tar-ri-du
3	¹ Gu-tar-za-a LUGAL u ¹ A-si ² -tu ² -x-gu ² -ra-a DAM-šú MÍ.GAŠAN
4	kun-nu-u' IGI-TAB

Comments

Obv. 11: Venus is below ♂ Leonis on the 24th. '18th' is obviously a mistake (this day number occurred already with the previous star, where it is correct); the number is damaged, but does not seem to be in the twenties.

Rev. I 1': last line of solar eclipse of -104 July.

2'ff.: lunar eclipse of -104 Aug 13.

9'f.: lunar eclipse of -103 Jan 8.

11'ff.: solar eclipse of -103 Jan 22.

IV 2': 24 may be a mistake for 14 or for 20 NINDA.

II

1'	The 14th,	sunrise [to moonset ² :] 5° 30' [....]
2'	The 27th,	moonrise to sunrise: 12°; measured.
3'	Month IV, (the 1st of which was identical with) the 30th (of the preceding month,)	sunset to moonset: 11° 10';
4'	dense mist; when I watched I did not see (the moon).	
5'	The 13th,	moonset to sunrise: 2°.
6'	The 14th,	moonrise to sunset: 30'.
7'	The 14th,	sunrise to moonset: 11°; measured.
8'	The 15th,	sunset to moonrise: 12° 20'; I did not watch.
9'	The 27th,	moonrise to sunrise: 20°; it was bright, measured.

III

1'	The 14th,	moonrise to sunset: 2° 30'.
2'	The 14th,	moonset to sunrise: 1°.
3'	The 15th,	sunset to moonrise: 5°.
4'	The 15th,	sunrise to moonset: 12° 10'; clouds, I did not watch.
5'	The 27th,	moonrise to sunrise: 20°; it was bright, measured.

IV

1'	The 13th,	moonset to sunrise: 10° ² 30'; clouds, I did not watch.
2'	The 14th,	sunrise to moonset: 24° ² ; measured.
3'	The 15th,	moonrise to sunset: 1° 40'; clouds, I did not watch.
4'	The 15th ^{sic} ,	sunset to moonrise: 15° 20'; clouds, I did not watch.
5'	The 27th,	moonrise to sunrise: 9°; it was faint; measured (despite) mist.
6'	Month I, the 1st (of which followed the 30th of the preceding month,)	sunset to moonset: 16° 50'; clouds, I did not watch.

Colophon (across cols. II-IV)

1	First days, appearances, passings, and eclipses which were established for year 161,
2	which is year 225, Arsaces who is called
3	Gutarza, being king and Asitu...gura, his wife, queen.
4	Checked.

No. 83

BM 34946 (= Sp II 465)

Copy: LBA 1258

Photo: Pl. 56

Goal year: SE 231-232'

Flake

- 1' [....] 'x' [....]
-
- 2' [MU-1-me-1,13-KAM 'Ar-ša-ka]-'a' LUGAL GU₄ 10+[x]
- 3' [.... x]+'5' na GENNA in [....]
- 4' [....] in 6 IGI GAN GE₆ 29 ina ZALÁG GENNA 'e' [RÍN šá ULÛ]
- 5' [.... ana NIM ki U]Š-ú 2/3 KÛŠ e RÍN šá [UL]Û 8 SI [ana NIM DIB UŠ]
- 6' [.... e RÍN šá UL]Û 2/3 KÛŠ ŠE in 30 GENNA ana [ME E-a (....)]
-
- 7' [.... G]U₄ 20 18.30 na AN in 25 A[N]
- 8' [....] KÛŠ ana SI NIM IGI TUR 16,30 n[a-su]
-
- 9' [....] 'x' EN 25 AN ana N[IM?]

Comments

The date of this tablet is based on the Saturn observations (2' - 6'). The planet was in Libra, close to α Librae at an eastern station. Given the slow movement of the planet, the passing of a normal star in l. 4' on IX 29 must also refer to α Librae. The last event has to be an acronychal rising around the end of month XII. These conditions are fulfilled by SE 173 and SE 114. The Mars events are listed in two separate sections, thus indicating that the tablet probably covered two years (or more). The corresponding years of Mars for SE 173 and 114 of Saturn would be SE 153 and SE 94, respectively. Under the assumption of two years, the Mars data (as far as preserved) fit the years SE 152 and 153, but not 93 and 94. It is possible that line 1' is the end of another Saturn section for SE 172 although of course this cannot be proven.

No. 84

BM 41275

Photo: Pl. 56

Goal year: SE 232'

Obv.:'

- I
- 1 [MU-x]-KAM
- 2 [DU₆] 'x ŠÚ' na
- 3 [x] ME GE₆
- 4 [APIN x ŠÚ] 'na'

No. 83

- 1' [....] [....]
-
- 2' [Year 173,] king [Arsace]s. Month II, the 10+[xth[?],]
- 3' [....] sunset to setting of Saturn: [x]+5°. Around [....]
- 4' [....] (ideal) first appearance on the 6th. Month IX, night of the 29th, last part of the night, Saturn was [....] above [α Librae]
- 5' [.... when Saturn] became stationary [to the east, it became stationary] 2/3 cubit above α Librae, [having passed] 8 fingers [to the east]
- 6' [....] 2/3 cubits [above α Libr]ae. Month XII, around the 30th, Saturn's acro[nychal rising]
-
- 7' [.... Mon]th II[?], the 20th, sunset to setting of Mars: 18° 30'. Around the 25th, Mars' [last appearance in]
- 8' [....] first appearance [....] cubits high to the north; it was small, rising of Mars to sunrise: 16° 30' [....]
-
- 9' [....] until the 25th, [when] Mars [became stationary] to the ea[st[?],]

No. 84

Obv.:'

- I
- 1 [Year]
- 2 [Month VII,] 'moonset to sunrise' (plus) 'sunrise to moonset':
- 3 'moonrise to sunset' (plus) 'sunset to moonrise': [....]
- 4 [Month VIII,] 'moonset to sunrise' (plus) 'sunrise to moonset': [....]

II

- 1 MU-2-me-13-KA[M]
 2 DIR-ŠE 30 11,10² DIR [...]
 3 13 5 Š[Ú
 4 '14' 2+[x] 'na'²
 5 [x x] 'x'

'Rev.'

- 1' [... x]+1 KÜŠ GE₆ 10+[x]
 2' [...] 'e' SI₄² 1½ KÜŠ GE₆ [...]

Comments

The date in col. II begins the Lunar Six section, which precedes the Goal year by 18 years; since SE 213 had a month XII₂, this is put before the year in question. Therefore, the Lunar Six will have been for SE 214, and the Goal year SE 232. It should be noted, however, that Mars (whose passings of Normal stars would usually be the last paragraph of the planetary section) was not anywhere near α Scorpii (see rev. 2') in the year expected, 47 years before the Goal year, i.e. SE 185.

No. 85

BM 35475 + 35879 (= Sp II 1066 + III 411) + 47874 (= 81-11-3, 581)

Copies: LBA 1340 (35475), 1343 (35879)

Photo: Pl. 58

Goal year: SE 236

'Obv.'

- 1' [... ina MAŠ]-MAŠ UŠ APIN 'in' 30² [...]
 2' [... UŠ²]-'a' ½ KÜŠ ina IGI MÚL ár šá še-pít MAŠ-MAŠ 8 S[I UŠ]
 3' [MU-1-me-53-KAM] ŠU GE₆ 24 ina ZÁLAG MÚL-BABBAR e MÚL IGI šá še-pít MAŠ-[MAŠ nn mm]
 4' [... e MÚL ár šá] še-pít MAŠ-MAŠ 2 SI KIN GE₆ 2 ina ZÁLAG MÚL-BABBAR e MAŠ-MAŠ šá [SIPA nn mm]
 5' [... ana ŠÚ] ina LAL-šú e MAŠ-MAŠ šá SIPA 3 KÜŠ GAN GE₆ 10 USAN [...]
 6' [... GE₆ x]+2 USAN MÚL-BABBAR e MÚL IGI šá še-pít MAŠ-MAŠ 8 S[I]
 7' [...] 'e' [M]ÚL IGI šá [še-pí]t MAŠ-[M]AŠ '8' SI' ŠE'-DIR 'GE₆' 1+[x]
 8' [... GE₆] '27 USAN MÚL'-BABBAR e MAŠ-MAŠ šá SIPA 3 K[ÜŠ]
 9' [... MU-2-me-28-KAM 'Ar-šá-ka']-'a' LUGAL GU₄ in 11 dele-bat ina ŠÚ ina MAŠ-MAŠ IGI NU PAP 'in' [...]
 10' [... ana N]IM DIB GE₆ 11 USAN dele-bat e SA₄ šá ABSIN 1 [KÜŠ]
 11' [...] GE₆ 5 USAN dele-bat SIG RÍN šá SI 3½ KÜŠ GE₆ 16 US[AN]

II

- 1 Year 213.
 2 Month XII₂, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 11° 10⁴; clouds, [...]
 3 The 13th, moonset [to sunrise:] 5° [...]
 4 The 14th, sunrise to moonset': 2+[x°]
 5 [...]

'Rev.'

- 1' [... x]+1 cubit. Night of the 10+[xth,]
 2' [...] 1½ cubits above α Scorpii'. Night [...]

No. 85

'Obv.'

- 1' [...] became stationary [in Ge]mini. Month VIII, around the 30th², [...]
 2' [...] when it became station[ary] [in, it became stationary] ½ cubit in front of μ Geminorum, 8 fin[gers]
 3' [Year 153,] Month IV, night of the 24th, last part of the night, Jupiter was [...] above η Geminorum [...]
 4' [...] 2 fingers [above μ] Geminorum. Month VI, night of the 2nd, last part of the night, Jupiter was [...] above γ Geminorum [...]
 5' [...Jupiter,] while moving back [to the west,] was 3 cubits above γ Geminorum. Month IX, night of the 10th, first part of the night, [...]
 6' [... night of the x]+2nd, first part of the night, Jupiter was 8 fingers above η Geminorum [...]
 7' [...] 8 [fingers] above μ Geminorum. Month XII₂, night of the 1+[xth,]
 8' [...] Night] of the 27th, first part of the night, Jupiter was 3 cubits above γ Geminorum.
 9' [Year 228,] king [Arsace]s. Month II, around the 11th, Venus' first appearance in the west in Gemini; I did not watch. Around [...]
 10' [...] having passed [...] to the ea]st. Night of the 11th, first part of the night, Venus was 1 [cubit] above α Virginis [...]
 11' [...] night of the 5th, first part of the night, Venus was 3½ cubits below β Librae. Night of the 16th, first part [of the night,]

- 12' [...] *dele-bat e* SI₄ 2 KÜŠ DU₆ GE₆ 1 USAN *dele-bat* SIG MÚL [KUR šá KIR₄ šil PA
....]
13' [...] 'x GE₆ '25' USAN' *dele-bat e* MÚL IGI šá S[UḪUR MÁŠ]
14' [...] 'x' [...]

'Rev.'

I'

- 1' [...] 'x' [...]
2' [1]4[?] 4 ME *m[uš]*
3' [1]4[?] 5,30 *na m[uš]*
4' [1]5[?] 8,30 GE₆ *muš*
5' [x] [x]+11,10 KUR *ki* PAP NU IGI

II'

- 1' 'x' [...]
2' 14 [...]
3' 'x' [...]

(break)

Colophon

- 1' [...] me]š DIB'-q[a[?]meš]

Comments

The date can be found from BM 34053 (No. 86), which is almost a duplicate.

No. 86

BM 34053 (= Sp 149) + 92682 (= Rm 678)

Copy: LBA 1296 (34053); ZA 6 (1891) 229f. (Rm 678)

Photo: Pl. 59f.

Bibliography: J. Epping - J. N. Strassmaier, ZA 5 (1891) 353-366; Pingree, Astral Sciences (1999) 169

Goal year: SE 236

Obv.

- 1 [MU-1-me-1-šu-5-KAM 'A]-*lek-sa-an-dar* LUGAL BAR 18[?] 13 *na* MÚL-BABB[AR]
2 [...] 'IGI' KUR 12 *na-su in* 19 IGI KIN *in* 'EN' 10+[x]
3 [...] ½[?] KÜŠ *ana* ULÙ SIG UŠ APIN *in* 21+[x]
4 [x x] 'x' *ina* IGI MÚL *ár šá še-pit* MAŠ-MAŠ 8 SI *ana* ULÙ [SIG UŠ]
5 MU-1-me-53-KAM 'De-met-ri' LUGAL GU₄ 2 ŠÚ šá MÚL-'BABBAR *ina* MÚL-MÚL'
T[A] '1 *ki* PAP NU IGI SIG 5 MÚL-BABBAR *ina* TIL MÚL-MÚL IGI KUR' 'x' *na-*
su
6 *in* 3 IGI ŠU GE₆ 24 *ina* ZÁLAG MÚL-BABBAR *e* MÚL [IGI] šá *še-pit* MAŠ-MAŠ 2 SI
IZI GE₆ 7 *ina* ZÁLAG MÚL-BABBAR *e* MÚL *ár šá še-pit* MAŠ-MAŠ
7 'x x x' GE₆ 2 USAN' MÚL-BABBAR *e* MAŠ-MAŠ' [šá] 'x' SIPA 2 2/3 KÜŠ DU₆ *in*
EN 6 MÚL-BABBAR 1 KÜŠ *ár* MAŠ-MAŠ šá SIPA UŠ
8 [APIN GE₆ x]+1 *ina* ZÁLAG MÚL-BABBAR *e* MAŠ-MAŠ šá SIPA 3 KÜŠ GAN *in* 4
MÚL-BABBAR *ana* ME E-a GE₆ 10 USAN MÚL-BABBAR *e* MÚL *ár*

- 12' [...] Venus was 2 cubits above α Scorpii. Month VII, night of the 1st, first part of the
night, Venus was [...] below θ [Ophiuchi]
13' [...] Night of the 25th, first part of the night, Venus was [...] above γ C[apricorni
....]
14' [...] [...]

'Rev.'

I'

- 1' [...] [...]
2' [The 1]4th[?], moonrise to sunset: 4°; mea[sured.]
3' [The 1]4th[?], sunrise to moonset: 5° 30'; mea[sured.]
4' [The 1]5th[?], sunset to moonrise: 8° 30'; measured.
5' [The xth,] moonrise to sunrise: [x]+11° 10'; when I watched I did not see it.

II'

- 1' [...]
2' The 14th, [...]
3' [...]

(break)

Colophon

- 1' [...] passin[gs,]

No. 86

Obv.

- 1 [Year 165,] king Alexander. Month I, the 18th[?], sunset to setting of Jupiter: 13° [...]
2 [...] first appearance [...]; it was bright, rising of Jupiter to sunrise: 12°; (ideal) first
appearance on the 19th. Month VI, around until the 10+[xth,]
3 [...] it became stationary [...] being ½[?] cubit low to the south. Month VIII, around
the 21st+[x]
4 [...] it became stationary [...] in front[?] of μ Geminorum, 8 fingers [low] to the south
[...]
5 Year 153, king Demetrius. Month II, the 2nd, Jupiter's last appearance in Taurus: from
the 1st, when I watched I did not see it. Month III, the 5th, Jupiter's first appearance
in the end of Taurus; it was bright[?], rising of Jupiter to sunrise:;
6 (ideal) first appearance on the 3rd. Month IV, night of the 24th, last part of the night,
Jupiter was 2 fingers above η Geminorum. Month V, night of the 7th, last part of the
night, Jupiter was above μ Geminorum.
7, night of the 2nd, first^{sic} part of the night, Jupiter was 2 2/3 cubits above γ
Geminorum. Month VII[?], around until the 6th, Jupiter became stationary 1 cubit behind
γ Geminorum.
8 [Month VIII, night of the x]+1st, last part of the night, Jupiter was 3 cubits above γ
Geminorum. Month IX, around the 4th, Jupiter's acronychal rising. Night of the 10th,
first part of the night, Jupiter was x fingers above μ

- 9 [šá še-pít MAŠ-MAŠ] 'x' SI GE₆ 23 'USAN' MÚL-BABBAR e MÚL IGI šá še-pít MAŠ-MAŠ 8 SI ZÍZ EN 6 MÚL-BABBAR ana ŠÚ ki UŠ-a 1½ KÙŠ
- 10 [x MÚL ár šá še-pí]t MAŠ-MAŠ 6 SI ana SI NIM UŠ' ŠE GE₆ 20 USAN MÚL-BABBAR ana ŠÚ ina LAL-šú e MÚL IGI šá še-pít MAŠ-MAŠ 8 SI
- 11 [DIR-ŠE GE₆ x U]SAN MÚL-BABBAR e MÚL ár šá še-pít MAŠ-MAŠ 6 SI GE₆ 27 USAN MÚL-BABBAR e MAŠ-MAŠ šá SIPA 3 KÙŠ
-
- 12 [MU-1-me]-'1-šu-4'-KAM šá ši-i MU-2-me-28 'Ar-šá-kam LUGAL BAR 30 GU₄ 1 in 11 dele-bat ina ŠÚ ina MAŠ-MAŠ IGI NU PAP in 28 dele-bat
- 13 'ALLA' KUR SIG 30 in 23 dele-bat A KUR ŠU 1 in 18 dele-bat ABSIN KUR IZI 1 GE₆ 2 USAN dele-bat SIG DELE šá IGI ABSIN 1 KÙŠ dele-bat 4 SI
- 14 ana NIM DIB GE₆ 11 USAN dele-bat e SA₄ šá ABSIN 1 KÙŠ in 13 dele-bat RÍN KUR KIN 30 GE₆ 1 USAN dele-bat SIG RÍN šá ULÙ
- 15 8 SI GE₆ 5 USAN dele-bat SIG RÍN šá SI 3½ KÙŠ GE₆ 16 USAN dele-bat e MÚL MURUB₄ šá SAG GÍR-TAB 2 SI GE₆ 22 USAN dele-bat
- 16 e SI₄ 2 KÙŠ DU₆ 1 GE₆ '1' USAN dele-bat SIG MÚL KUR šá KIR₄ šil PA 2 SI MÚL KUR NU IGI in 4 dele-bat PA KUR in 30 dele-bat MÁŠ KUR
- 17 APIN 1 GE₆ 10 USAN dele-bat SIG SI MÁŠ 3 KÙŠ GE₆ 25 USAN dele-bat e MÚL IGI šá SUḪUR MÁŠ 1 SI GE₆ 27 USAN dele-bat
- 18 e MÚL ár šá SUḪUR MÁŠ 1 SI GAN 30 AB 30 in 5 dele-bat zib^{me} KUR ZÍZ 1 in 5 dele-bat GU KUR in 10 dele-bat ina ŠÚ ina TIL GU 'ŠÚ'
- 19 15 dele-bat ina NIM ina GU IGI KUR NIM-a 12 na-su in 12 IGI ŠE 30 in 30 dele-bat zib^{me} KUR BAR 1
-
- 20 MU-1-me-26-KAM šá ši-i MU-1-me-1,30-KAM 'Ar-šá-kam LUGAL GU₄ in 6 GU₄-UD ina ŠÚ^{sic} UD-DA IGI DIB in 20 GU₄-UD ina NIM

- 9 [Geminorum.] Night of the 23rd, first part of the night, Jupiter was 8 fingers above η Geminorum. Month XI, until the 6th, when Jupiter became stationary to the west, it became stationary 1½ cubits
- 10 [.... μ] Geminorum, being 6 fingers high to the north. Month XII, night of the 20th, first part of the night, Jupiter, while moving back to the west, was 8 fingers above η Geminorum.
- 11 [Month XII₂, night of the xth,] first part of the night, Jupiter was 6 fingers above μ Geminorum. Night of the 27th, first part of the night, Jupiter was 3 cubits above γ Geminorum.
-
- 12 [Year I]64, which is year 228, king Arsaces. Month I, (the 1st of which was identical with) the 30th (of the preceding month). Month II, the 1st (of which followed the 30th of the preceding month). Around the 11th, Venus' first appearance in the west in Gemini; I did not watch. Around the 28th, Venus
- 13 reached Cancer. Month III, (the 1st of which was identical with) the 30th (of the preceding month). Around the 23rd, Venus reached Leo. Month IV, the 1st (of which followed the 30th of the preceding month). Around the 18th, Venus reached Virgo. Month V, the 1st (of which followed the 30th of the preceding month). Night of the 2nd, first part of the night, Venus was 1 cubit below γ Virginis, Venus having passed 4 fingers
- 14 to the east. Night of the 11th, first part of the night, Venus was 1 cubit above α Virginis. Around the 13th, Venus reached Libra. Month VI, (the 1st of which was identical with) the 30th (of the preceding month). Night of the 1st, first part of the night, Venus was 8 fingers below α Librae.
- 15 Night of the 5th, first part of the night, Venus was 3½ cubits below β Librae. Night of the 16th, first part of the night, Venus was 2 fingers above δ Scorpīi. Night of the 22nd, first part of the night, Venus was
- 16 2 cubits above α Scorpīi. Month VII, the 1st (of which followed the 30th of the preceding month). Night of the 1st, first part of the night, Venus was 2 fingers below θ Ophiuchi; I did not see θ. Around the 4th, Venus reached Sagittarius. Around the 30th, Venus reached Capricorn.
- 17 Month VIII, the 1st (of which followed the 30th of the preceding month). Night of the 10th, first part of the night, Venus was 3 cubits below β Capricorni. Night of the 25th, first part of the night, Venus was 1 finger above γ Capricorni. Night of the 27th, first part of the night, Venus was
- 18 1 finger above δ Capricorni. Month IX, (the 1st of which was identical with) the 30th (of the preceding month). Month X, (the 1st of which was identical with) the 30th (of the preceding month). Around the 5th, Venus reached Pisces. Month XI, the 1st (of which followed the 30th of the preceding month). Around the 5th, Venus reached Aquarius. Around the 10th, Venus' last appearance in the west in the end of Aquarius.
- 19 The 15th, Venus' first appearance in the east in Aquarius; it was bright (and) high, rising of Venus to sunrise: 12°; (ideal) first appearance on the 12th. Month XII, (the 1st of which was identical with) the 30th (of the preceding month). Around the 30th, Venus reached Pisces. Month I, the 1st (of which followed the 30th of the preceding month).
-
- 20 Year 126, which is year 190, king Arsaces. Month II, around the 6th, Mercury's first appearance in the west^{sic}, omitted. Around the 20th, Mercury's last appearance in the east.

- 21 UD-DA ŠÚ-[šú] DIB SIG 19 GU₄-UD *ina* ŠÚ *ina* ALLA IGI 15 *na-su in* 17 IGI GE₆ 26
USAN GU₄-UD *e* LUGAL 8 SI LUGAL NU IGI
- 22 ŠÚ ⁱⁿ 23 GU₄-UD *ina* ŠÚ *ina* A ŠÚ NU PAP IZI 24 GU₄-UD *ina* NIM *ina* A IGI
KUR NIM-a 16,40 *na-su in* 21 IGI KIN *in* 5¹
- 23 GU₄-UD ABSIN KUR IGI-šú šá GU₄-UD *ina* NIM *ina* ABSIN TA 12 *ki* PAP NU IGI
APIN *in* 8 GU₄-UD *ina* ŠÚ *ina* PA IGI DIR NU PAP *in* 23
- 24 GU₄-UD *ina* ŠÚ *ina* PA ŠÚ DIR NU PAP GAN *in* 7 GU₄-UD *ina* NIM *ina* PA IGI
DIR NU PAP AB *in* 13 GU₄-UD *ina* NIM *ina* MÁŠ ŠÚ NU PAP
- 25 ZÍZ 24 GU₄-UD *ina* ŠÚ *ina* zib^{me} IGI 15 *na-su in* 23 IGI *in* 30 GU₄-UD HUN KUR ŠE
GE₆ 6 USAN GU₄-UD SIG
- 26 MÚL IGI šá SAG HUN 2½ KÜŠ GE₆ 10 USAN GU₄-UD SIG MÚL ár šá SAG HUN
3½ KÜŠ *in* 17 GU₄-UD *ina* ŠÚ *ina* HUN ŠÚ DIR NU PAP
-
- 27 MU-1-me-1,17-KAM ^{Ar-šá-kam} LUGAL GU₄ *in* 4 GENNA *ana* ME E-a ŠU EN 8
GENNA *ana* ŠÚ *ki* UŠ-a 1 KÜŠ ár SI₄
- 28 *ana* NIM GUB 3 KÜŠ *ana* SI NIM UŠ APIN 4 ŠÚ šá GENNA *ina* GÍR-TAB TA 2 *ki*
PAP NU IGI GAN 6 GENNA *ina* TIL GÍR-TAB IGI
- 29 KUR NIM-a 15 *na-su in* 4 IGI
-
- 30 MU-1-me-1,18-KAM BAR *in* 6 GENNA *ana* NIM *ki* UŠ-ú 1 KÜŠ <*ina*> IGI 4-AM
IGI^{meš} šá PA šá *ana* ZA *maš-lu* 3 KÜŠ
- 31 [*ana*] SI NIM UŠ NU PAP
-
- 32 [MU-1-me]-⁵⁷1-KAM ^{De-met-ri} LUGAL BAR GE₆ 28 *ina* ZÁLAG AN SIG MÚL KUR
šá DUR *nu-nu* 3 KÜŠ GU₄ GE₆ 7 *ina* ZÁLAG AN SIG MÚL IGI
- 33 [šá SAG HUN *nn* KÜŠ] GE₆ 13 *ina* ZÁLAG AN SIG MÚL ár šá SAG HUN 5½ KÜŠ
SIG GE₆ 9 *ina* ZÁLAG AN SIG MÚL-MÚL 2 KÜŠ GE₆ 20+[x]
- 34 [*ina* ZÁLAG AN *e is le*₁₀] 2¹ KÜŠ ŠU GE₆ 18 *ina* ZÁLAG AN SIG šur GIGIR šá SI 2½
KÜŠ GE₆ 23 *ina* ZÁLAG AN *e šur* GIGIR šá ULÙ
- 35 [*nn mm ina*] 'ZÁLAG' AN *e* MÚL IGI šá še-pit MAŠ-MAŠ 8 SI AN 2 KÜŠ *ana* ŠÚ
LAL GE₆ 12 *ina* ZÁLAG AN *e* MÚL ár
- 36 [šá še-pit MAŠ-MAŠ *nn mm*] 'x' [*.... KI*]N¹ GE₆ 9 *ina* ZÁLAG AN SIG MAŠ-MAŠ
IGI 2½ KÜŠ

- 21, omitted. Month III, the 19th, Mercury's first appearance in the west in Cancer;
sunset to setting of Mercury: 15°; (ideal) first appearance on the 17th. Night of the
26th, first part of the night, Mercury was 8 fingers above α Leonis; I did not see α
Leonis.
- 22 Month IV, around the 23rd, Mercury's last appearance in the west in Leo; I did not
watch. Month V, the 24th, Mercury's first appearance in the east in Leo; it was bright
(and) high, rising of Mercury to sunrise: 16° 40'; (ideal) first appearance on the 21st.
Month VI, around the 5th¹,
- 23 Mercury reached Virgo. The first^{sic} appearance of Mercury in the east in Virgo: from
the 12th, when I watched I did not see it. Month VIII, around the 8th, Mercury's first
appearance in the west in Sagittarius; clouds, I did not watch. Around the 23rd,
- 24 Mercury's last appearance in the west in Sagittarius; clouds, I did not watch. Month
IX, around the 7th, Mercury's first appearance in the east in Sagittarius; clouds, I did
not watch. Month X, around the 13th, Mercury's last appearance in the east in Capricorn;
I did not watch.
- 25 Month XI, the 24th, Mercury's first appearance in the west in Pisces; sunset to setting
of Mercury: 15°; (ideal) first appearance on the 23rd. Around the 30th, Mercury reached
Aries. Month XII, night of the 6th, first part of the night, Mercury was
- 26 2½ cubits below β Arietis. Night of the 10th, first part of the night, Mercury was 3½
cubits below α Arietis. Around the 17th, Mercury's last appearance in the west in
Aries; clouds, I did not watch.
-
- 27 Year 177, king Arsaces. Month II, around the 4th, Saturn's acronychal rising. Month
IV, until the 8th, when Saturn became stationary to the west, it became stationary
standing 1 cubit behind α Scorpui
- 28 to the east, being 3 cubits high to the north. Month VIII, the 4th, Saturn's last appearance
in Scorpui: from the 2nd, when I watched I did not see it. Month IX, the 6th, Saturn's
first appearance in the end of Scorpui;
- 29 it was bright (and) high, rising of Saturn to sunrise: 15°; (ideal) first appearance on the
4th.
-
- 30 Year 178. Month I, around the 6th, when Saturn became stationary to the east, it
became stationary 1 cubit in front of the four front ones of Sagittarius which are
similar to (the sign) ZA, being 3 cubits
- 31 high to the north; I did not watch.
-
- 32 [Year 1]57, king Demetrius. Month I, night of the 28th, last part of the night, Mars
was 3 cubits below η Piscium. Month II, night of the 7th, last part of the night, Mars
was [...] below β
- 33 [Arietis.] Night of the 13th, last part of the night, Mars was 5½ cubits below α Arietis.
Month III, night of the 9th, last part of the night, Mars was 2 cubits below η Tauri.
Night of the 20+[xth,]
- 34 [Mars was] 2¹ cubits [above α Tauri.] Month IV, night of the 18th, last part of the
night, Mars was 2½ cubits below β Tauri. Night of the 23rd, last part of the night,
Mars was [...] above ζ Tauri.
- 35 [...] last part of the night, Mars was 8 fingers above η Geminorum, Mars being 2 cubits
back to the west. Night of the 12th, last part of the night, Mars was [...] above μ
- 36 [Geminorum] [.... Mon]th VI¹, night of the 9th, last part of the night, Mars was
2½ cubits below α Geminorum.

- 37 [...] 'KÜŠ' 1½ KÜŠ ář MAŠ-MAŠ ář 2 KÜŠ
 38 [ana ULÜ SIG UŠ GAN] in 2 AN ana ME E-a

Rev.

1-3 (broken)

- 4 [MU-1-me-1-šu-29-KAM ina ZÁLAG AN SIG] MÚL KUR šá DUR nu-nu
 5 [nn KÜŠ ina ZÁLAG AN SIG] MÚL ář šá SAG HUN
 6 [nn KÜŠ ina ZÁLAG AN e is le₁₀] 3' KÜŠ IZI GE₆ 7
 7 [ina ZÁLAG AN SIG šur GIGIR šá SI nn mm] 4 SI ana NIM DIB
 8 [... ina ZÁLAG AN e MÚL ář šá] še-pít MAŠ-MAŠ 6 SI
 9 [... ina ZÁLAG] AN SIG MAŠ-MAŠ IGI
 10 [nn mm ina ZÁLAG AN SIG MÚL IGI šá ALLA šá SI 2 SI
 11 [...] APIN GE₆ 8 ina ZÁLAG AN
 12 [... US]AN AN SIG 'x x' KÜŠ
 13 [... A]B EN 10 AN ana ŠÚ ki UŠ-a 1 KÜŠ
 14 ina IGI [MAŠ-MAŠ IGI ář MÚL-BABBAR] '1' ½ KÜŠ ana SI NIM UŠ GE₆ 26
 USAN
 15 AN [SIG MAŠ-MAŠ IGI nn mm ZÍZ G]E₆ '13' USAN AN SIG MAŠ-MAŠ ář 1 2/3
 KÜŠ ŠE GE₆ 22
 16 USAN [AN e MÚL IGI šá ALLA] šá SI [...]
 17 MU-1-me-1-šu-5-KAM SIG GE₆ '10' ina ZÁLAG MÚL-BABBAR e MÚL IGI šá še-
 pit MAŠ-MAŠ 6 SI GE₆ 30 ina ZÁLAG
 18 MÚL-BABBAR e MÚL ář šá še-pít MAŠ-MAŠ 6 SI DU₆ GE₆ 18 ina ZÁLAG MÚL-
 BABBAR e MAŠ-MAŠ šá SIPA 3 KÜŠ
 19 GAN GE₆ 1 USAN MÚL-BABBAR ana ŠÚ ina LAL-šu e MAŠ-MAŠ šá SIPA 3 KÜŠ
 AB GE₆ 1 USAN MÚL-BABBAR
 20 e MÚL ář šá še-pít MAŠ-MAŠ 8 SI ZÍZ GE₆ 13 USAN MÚL-<BABBAR> e MÚL ář šá
 še-pít MAŠ-MAŠ 8 SI
 21 ŠE GE₆ 13 USAN MÚL-BABBAR e MAŠ-MAŠ šá SIPA 2 2/3 KÜŠ

Comments

Note that this tablet contains only the planetary part of a goal-year text. Further, although there are two paragraphs for Jupiter and Mars, respectively, both paragraphs contain Greek-letter phenomena and passings of Normal Stars.

Obv. 7: The stationary point is expected on VII 6 according to computation.

10: before ŠE, UŠ is expected. The sign seems to be written on top of another one.

12ff.: note that the entries of Venus into zodiacal signs are listed here, as well as month lengths. This can also be found in the Venus texts edited in vol. V No. 56.

20ff.: the Mercury paragraph too contains a few entries into zodiacal signs.

35: 2 KÜŠ ana ŠÚ LAL is probably an error for 2 SI.

37: this must refer to Mars' stationary point; the '2 cubits' at the end of the line very likely give the vertical distance between Mars and β Geminorum.

Rev. 14: At its stationary point, Mars was above and behind Jupiter, which is probably mentioned in the break.

17ff.: this paragraph supplies passings of Normal Stars by Jupiter for the first paragraph of the text, which contains only Greek-letter phenomena.

- 37 [... it became stationary] cubits [...], 1½ cubits behind β Geminorum, 2 cubits
 38 [low to the south Month IX,] around the 2nd, Mars' acronychal rising.

Rev.

1-3 (broken)

- 4 [Year 189, last part of the night, Mars was below] η Piscium.
 5 [... last part of the night, Mars was below] α Arietis.
 6 [... last part of the night, Mars was] 3' cubits [above α Tauri. Month V, night of the
 7th,
 7 [last part of the night, Mars was below β Tauri] having passed 4 fingers to the
 east.
 8 [... last part of the night, Mars was] 6 fingers [above μ] Geminorum.
 9 [... last part of the night,] Mars was [...] below α Geminorum.
 10 [... last part of the night, Mars was] 2 fingers [below] η Cancri.
 11 [...] Month VIII, night of the 8th, last part of the night, Mars was
 12 [...] first part of the night, Mars was cubits below
 13 [...] Month X, until the 10th, when Mars became stationary to the west, it became
 stationary 1 cubit
 14 in front of [α Geminorum, behind Jupiter,] being 1½ cubits high to the north.
 Night of the 26th, first part of the night,
 15 Mars was [...] below α Geminorum. Month XI, night of the 13th², first part of the
 night, Mars was 1 2/3 cubits below β Geminorum. Month XII, night of the 22nd,
 16 first part of the night, [Mars was above η Can]cri [...]
 17 Year 165. Month III, night of the 10th², last part of the night, Jupiter was 6 fingers
 above η Geminorum. Night of the 30th, last part of the night,
 18 Jupiter was 6 fingers above μ Geminorum. Month VII, night of the 18th, last part of
 the night, Jupiter was 3 cubits above γ Geminorum.
 19 Month IX, night of the 1st, first part of the night, Jupiter, while moving back to the
 west, was 3 cubits above γ Geminorum. Month X, night of the 1st, first part of the
 night, Jupiter was
 20 8 fingers above μ Geminorum. Month XI, night of the 13th, first part of the night,
 Jupiter was 8 fingers above μ Geminorum.
 21 Month XII, night of the 13th, first part of the night, Jupiter was 2 2/3 cubits above γ
 Geminorum.

No. 87

BM 35956 (= Sp III 492)

Copy: LBA 1299

Goal-year: SE 240

Obv.

- 1 [M]U-1-me-1-šu-9-KAM ¹D[e-met-ri] LUGAL [...]
 2 'KIN¹ 1 15,30 na MÚL-[BABBAR [...]
 3 ár AN 2 KÙŠ ana NIM² GUB ½ KÙŠ ana SI [NIM IGI [...]
 4 ár RÍN šá ULÙ ½ KÙŠ ana SI NIM U[Š [...]
 5 'MU-1-me¹-57-'KAM ¹De¹-met-ri LUGAL [...]
 6 [...] 'x¹ 4 'x¹ [...]

'Rev.

- 1' šá ší-i M[U-2-me-40-KAM [...]

No. 88

BM 35317 (= Sp II 888)

Copy: LBA 1300

Photo: Pl. 60f.

Goal-year: SE 245

'Obv.

- 1' [...] 'x x¹ [x x] '9² x x¹ [...]
 2' [...] MÚL] TUR šá 4 KÙŠ ár LUGAL 8 SI [...]
 3' [...] ina NIM] ina RÍN ŠÚ DIR NU PAP AB in 5 dele-bat [ina ŠÚ ina x IGI [...]
 4' [...] 'HUN² 4¹ KÙŠ GE₆ 16² USAN 'dele-bat SIG¹ [MÚL] 'ár² šá SAG 'HUN² 5 KÙŠ
 DIR-[ŠE [...]
 5' [...] 'x 1² KÙŠ² 8 SI
 6' [...] 'x x x¹ KAM ¹Ar¹-[šá]-'ka-a¹ LUGAL BAR 4 13,30 na 'GU₄-UD¹ in [...]
 7' [...] G]U₄-UD 'ina ŠÚ ina x¹ [(x) IGI] '15² na-su in¹ [x] IGI GE₆ '20+x USAN GU₄-
 UD [...]
 8' [...] 'x x x x GU₄-UD S[IG] 'x x x x¹ KÙŠ SIG 29 ŠÚ šá G[U₄-UD] ina ŠÚ ina 'x¹ [...]
 9' [...] 'x x GU₄-UD ina NIM² [x x] IGI 'x na-su in 22 IGI IZI 'in¹ [x]
 10' [ŠÚ šá GU₄-UD ina NIM TA] 'x ki PAP NU IGI DU₆ in¹ [x GU₄-UD ina ŠÚ UD-DA]
 IGI DIB in 18

No. 87

Obv.

- 1 Year 169, [king] D[emetrius [...]
 2 Month VI, the 1st, rising of Jupi[ter] to sunrise: 15° 30' [...]
 3 it stood 2 cubits behind Mars to the east², ½ cubit [high] to the north [...]
 4 it became sta[tionary [...] behind α Librae, ½ cubit high to the north. [...]
 5 Year 157, king Demetrius. [...]
 6 [...] 4 [...]

'Rev.

- 1' which is year [240]

No. 88

'Obv.

- 1' [...] [....] 9th [...]
 2' [...] 8 fingers [...] Q Leonis [...]
 3' [...] last appearance [in the east] in Libra; clouds, I did not watch. Month X, around
 the 5th, Venus' [first appearance in the west in [...]
 4' [...] 4² cubits [below β Arie]tis. Night of the 16th², first part of the night, Venus was 5
 cubits below α Arietis. Month [XII₂, [...]
 5' [...] 1² cubit² 8 fingers [...]
 6' [Year 199,], king Arsaces. Month I, the 4th, rising of Mercury to sunrise: 13° 30'.
 Around the [...]
 7' [...] Mercury's [first appearance] in the west in; sunset to setting of Mercury: 15°;
 (ideal) first appearance on the [xth.] Night of the 20+xth, first part of the night,
 Mer[cury] [...]
 8' [...] Mercury was cubits below Month III, the 29th, Mercury's last appearance
 in the west in [...]
 9' [...] Mercury's first appearance in the east [in] rising of Mercury to sunrise:;
 (ideal) first appearance on the 22nd. Month V, around the [xth,]
 10' [Mercury's last appearance in the east: from] the xth, when I watched I did not see it.
 Month VII, around [the xth, Mercury's] first appearance [in the west] omitted.
 Around the 18th,

- 11' [GU₄-UD] 'ina ŠÚ UD¹ [DA ŠÚ-šú DIB AP] IN 8 GU₄-UD ina NIM ina 'x' [IGI 'KUR x' [na]-'su' in 5 IGI GE₆ 22']
- 12' [ina ZÁLAG] GU₄-UD 'e' M[ÚL e šá S] AG GÍR-TAB 4 SI GE₆ 29 'ina ZÁLAG GU₄-UD e' [SI₄] 2½ KÙŠ GAN in 10+[x]
- 13' [GU₄-UD] 'ina NIM ina SAG PA ŠÚ DIR NU' PAP¹ AB 22' GU₄-UD ina ŠÚ ina GU 'IGI' x x na-su' in 21 [IGI]
- 14' [ZÍZ x] ŠÚ šá GU₄-UD ina ŠÚ ina SAG zib^{me} TA 11 ki PAP NU IGI ŠE in 5 GU₄-UD ina NIM ina GU IGI KUR 'x' [...]
- 15' [in x] IGI 24 16,30 na GU₄-UD in 28 GU₄-UD ina NIM ina zib^{me} ŠÚ
-
- 16' [MU-1-me-1,] 26-KAM 'Ar-šá-ka-a LUGAL ŠU in EN 14 GENNA ana NIM ki UŠ-ú ina zib^{me} UŠ 'KIN in x'
- 17' [GENNA ana] ME E-a APIN EN 10 GENNA ana ŠÚ ki UŠ-a 8 SI SIG MÚL-BABBAR 4 SI ana ŠÚ LAL UŠ ŠE 6 GENNA 'ina' [x ŠÚ]
-
- 18' MU-1-me-1-šú-6-KAM 'A-lek-sa-an-dar LUGAL BAR in EN 10 AN ana NIM ki UŠ-ú 1 KÙŠ ár 4-ÀM IGI^{me}
- 19' šá PA šá ana ZA maš-lu UŠ GU₄ in 20 AN ana ME E-a SIG EN 25 AN ana ŠÚ ki UŠ-a 1 KÙŠ ár MÚL 'KUR'
- 20' šá KIR₄ šil-tah PA 2/3 KÙŠ ana ULÙ SIG UŠ
-
- 21' MU-1-me-34-KAM šá ší-i MU-1-me-1,38-KAM 'Ar-šá-ka-a LUGAL KIN GE₆ 13 USAN AN SIG SI MÁŠ [nn mm]
- 22' DU₆ GE₆ 10 USAN AN ina IGI MÚL IGI šá SUḪUR MÁŠ 4 SI GE₆ 13 USAN AN ina IGI MÚL ár šá S[UḪUR]
- 23' [MÁŠ x]+1 SI AB GE₆ 20 USAN AN SIG MÚL KUR šá DUR nu-nu 2½ KÙŠ GE₆ 30 USAN A[N]
- 24' [SIG MÚL] IGI šá SAG ḪUN 3 KÙŠ ZÍZ GE₆ 5 USAN AN SIG MÚL ár šá SAG ḪUN 4½ [KÙŠ]
- 25' [... x]+1 'USAN' AN SIG MÚL-MÚL 1½ KÙŠ

Rev.:

I

1	[DU ₆	x]	ŠÚ na
2	[	x]	ME GE ₆
3	[APIN	x],30	ŠÚ na
4	[	x]	ME GE ₆

- 11' [Mercury's last appearance] in the west, [omitted. Mon]th VIII, the 8th, Mercury's [first appearance] in the east in; it was bright, rising of Mercury to sunrise:; (ideal) first appearance on the 5th. Night of the 22nd',
- 12' [last part of the night,] Mercury was 4 fingers above β Scorpii. Night of the 29th, last part of the night, Mercury was 2½ cubits above [α Scorpii.] Month IX, around the 10+[xth,]
- 13' [Mercury's] last appearance in the east in the beginning of Sagittarius; clouds, I did not watch'. Month X, the 22nd', Mercury's first appearance in the west in Aquarius; sunset to setting of Mercury:; [(ideal) first appearance] on the 21st.
- 14' [Month XI, the xth,] Mercury's last appearance in the west in the beginning of Pisces: from the 11th, when I watched I did not see it. Month XII, around the 5th, Mercury's first appearance in the east in Aquarius; it was bright [...]
- 15' (ideal) first appearance [on the xth.] The 24th, rising of Mercury to sunrise: 16° 30'. Around the 28th, Mercury's last appearance in the east in Pisces.
-
- 16' [Year 18]6, king Arsaces. Month IV, around until the 14th, when Saturn became stationary to the east, it became stationary in Pisces. Month VI, around the xth,
- 17' [Saturn's] acronychal rising. Month VIII, until the 10th, when Saturn became stationary to the west, it became stationary 8 fingers below Jupiter, being 4 fingers back to the west. Month XII, the 6th, Saturn's [last appearance] in [...]
-
- 18' Year 166, king Alexander. Month I, around until the 10th, when Mars became stationary to the east, it became stationary 1 cubit behind the four front ones
- 19' of Sagittarius which are similar to (the sign) ZA. Month II, around the 20th, Mars' acronychal rising. Month III, until the 25th, when Mars became stationary to the west, it became stationary 1 cubit behind
- 20' θ Ophiuchi, being 2/3 cubit low to the south.
-
- 21' Year 134, which is year 198, king Arsaces. Month VI, night of the 13th, first part of the night, Mars was [...] below β Capricorni.
- 22' Month VII, night of the 10th, first part of the night, Mars was 4 fingers in front of γ Capricorni. Night of the 13th, first part of the night, Mars was [x]+1 fingers in front of δ Capricorni.
- 23' Month X, night of the 20th, first part of the night, Mars was 2½ cubits below η Piscium. Night of the 30th, first part of the night, Mars
- 24' was 3 cubits [below] β Arietis. Month XI, night of the 5th, first part of the night, Mars was 4½ [cubits] below α Arietis.
- 25' [... night of the x]+1st, first part of the night, Mars was 1½ cubits below η Tauri.

Rev.:

I

1	[Month VII,]	'moonset to sunrise' (plus) 'sunrise to moonset': [...]
2		'moonrise to sunset' (plus) 'sunset to moonrise': [...]
3	[Month VIII,]	'moonset to sunrise' (plus) 'sunrise to moonset': [x°] 30'
4		'moonrise to sunset' (plus) 'sunset to moonrise': [...]

- 5 [GAN] 'x¹ 30 ŠÚ na
 6 [] 18,40 ME GE₆
 7 [AB] 14,30 ŠÚ na
 8 [] 'x¹ ME GE₆
 9 [ZÍZ] 'x¹ ŠÚ [na]

II

- 1 M[U-2]-me-27-KA[M]
 2 [1A]r-šá-ka-a LUGAL
 3 BAR 30 17¹ na-su a-kam muš
 4 14³ 'x¹ 'ŠÚ¹ a-kam KALAG NU [PAP]
 5 15 8 'ME¹ DIR N[U PAP]
 6 15 7 'na¹ a-kam muš
 7 [16] 'x¹ [GE₆] 'x¹ [...]

III

- 1 'x¹ [...]
 2 1[3 x ME [...]
 3 [13] 'x x¹ [ŠÚ [...]
 4 [14 x] GE₆ [a]-kam [x]
 5 '14 12,40 na¹ a-kam muš
 6 [x] 'x x¹ [...]
 7 'x¹ [...]
 8 [...] 'x¹ [...]

IV

- 1 [...]
 2 1[5 x] ME [...]
 3 1[5] 'x¹ ŠÚ [...]
 4 1[6 x]+1 GE₆
 5 16 14² na a-k[am muš]
 6 27 24,40 KUR DIR NU [PAP]
 7 'ZÍZ¹ 30 15,20 na-su¹
 8 'x¹ 1 'x¹ [...]
 9 [...] 'x¹ DIR NU [PAP]

Comments

Obv. 6¹: The traces at the beginning of the line do not fit the expected MU-1-me-1.39-KAM.
 10¹f.: The restorations in these lines are mostly guesswork.

- 5 [Month IX,] 'moonset to sunrise' (plus) 'sunrise to moonset': 'x⁰ 30'
 6 'moonrise to sunset' (plus) 'sunset to moonrise': 18° 40'
 7 [Month X,] 'moonset to sunrise' (plus) 'sunrise to moonset': 14° 30'
 8 'moonrise to sunset' (plus) 'sunset to moonrise':
 9 [Month XI, 'moonset to sunrise' [(plus) 'sunrise to moonset':]

II

- 1 Year [2]27.
 2 king Arsaces.
 3 Month I, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 17°; measured (despite) mist.
 4 The 14th¹, moonset to sunrise:; dense mist, I did not [watch.]
 5 The 15th, moonrise to sunset: 8°; clouds, I did not [watch.]
 6 The 15th, sunrise to moonset: 7°; measured (despite) mist.
 7 [The 16th, sunset to moonrise:]

III

- 1 [...]
 2 The 1[3th, moonrise to sunset:]
 3 [The 13th, moonset to sunrise:] [...]
 4 [The 14th,] sunset to moonrise: [...] mist [...]
 5 The 14th, sunrise to moonset: 12° 40'; measured (despite) mist.
 6 [...] [...]
 7 [...]
 8 [...] [...]

IV

- 1 [...]
 2 The 1[5th,] moonrise to sunset: [...]
 3 The 1[5th,] moonset to sunrise: [...]
 4 The 1[6th,] sunset to moonrise: [x]+1°
 5 The 16th, sunrise to moonset: 14°; [measured (despite)] mist.
 6 The 27th, moonrise to sunrise: 24° 40'; clouds, I did not [watch.]
 7 Month XI¹, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 15° 20';
 8 1 [...]
 9 [...]; clouds, I did not [watch.]

No. 89

BM 35921 (= Sp III 457)

Copy: LBAT 1349

Goal year: SE 245?

Flake

- 1' [...] 'x' [...]
 2' [...] šá² KUR [...]
 3' [...] 'x x' [...]
 4' [...] 'x IGI' x' [...]
 5' [...] *dele-bat e* MÚL [...]
 6' [...] *ina* RÍN ŠÚ DIR NU P[AP ...]
 7' [...] SIG MÚL *ár² šá* S]AG HUN 4 KÙŠ GE₆ '15²¹ [...]
 8' [...] *dele-bat* SIG M]ÚL-MÚL 1 KÙŠ 8 SI [...]
 9' [...] BAR 4 13,30 *na* GU₄-UD [...]
 10' [...] G]E₆ 23 USAN [...]
 11' [...] TA 23 [*ki* PAP NU IGI ...]

Comments

This text seems to be a duplicate to BM 35317 (No. 88), see lines 8'f. If this is correct, the Venus section refers to the year SE 237 and the Mercury section to SE 199.

No. 90

BM 41847 (= 81-6-25, 467)

Copy: LBAT 1302

Photo: Pl. 61

Goal year: SE 246

Rm 763+946 (No. 91) may be part of the same tablet.

'Obv.'

- 1' [...] 'x x' [...]
 2' [x GE₆ x U]SAN *dele-bat e* [...]
 3' [MU-1-me-1,14]-KAM šá šī-[i MU-2-me-38-KAM ...]
 4' [x MÚ]L IGI šá šē-pít MAŠ-[MAŠ nn mm ...]
 5' [GE₆] 16 USAN *dele-[bat ...]*
 6' [x] MÚL *ár šá* ALLA [...]
 7' [G]E₆ 29 USAN *dele-[bat ...]*
 8' GE₆ 20 USAN *dele-bat* SIG [...]
 9' KIN 1 2 *dele-bat ina* NIM *ina* 'ABSIN' IGI x x *na¹-su i*[n x IGI ...]
 10' *ina* ZÁLAG *dele-bat e* SA₄ šá ABSIN 1 KÙŠ 8 SI *in* 22 [...]

No. 89

Flake

- 1' [...] ... [...]
 2' [...] ... [...]
 3' [...] ... [...]
 4' [...] ... [...]
 5' [...] Venus was [...] above ... [...]
 6' [...] Venus'] last appearance [...] in Libra; clouds, I did not watch [...]
 7' [...] 4 cubits [below α²] Arietis. Night of the 15th², [...]
 8' [...] Venus was] 1 cubit 8 fingers [below] η Tauri [...]
 9' [...] Month I, the 4th, rising of Mercury to sunrise: 13° 30' [...]
 10' [...] Night of the 23rd, first part of the night, [...]
 11' [...] from the 23rd [when I watched I did not see it ...]

No. 90

'Obv.'

- 1' [...] ... [...]
 2' [Month ..., night of the xth, fi]rst part of the night, Venus was [...] above [...]
 3' [Year 174,] which is [year 238, ...]
 4' [...] η Geminorum [...]
 5' [Night] of the 16th, first part of the night, Ven[us ...]
 6' [...] γ/θ Canceri [...]
 7' [Ni]ght of the 29th, first part of the night, Ven[us ...]
 8' Night of the 20th, first part of the night, Venus was [...] below [...]
 9' Month VI, the 1st (or) 2nd, Venus' first appearance in the east in Virgo²; rising of Venus to sunrise: ...; [(ideal) first appearance] o[n the xth ...]
 10' last part of the night, Venus was 1 cubit 8 fingers above α Virginis. Around the 22nd, [...]

- 11' SIG RÍN šá SI 2 KÜŠ in 23 dele-bat GÍR-TAB KUR GE₆ 30 ina ZÁLAG [...]
 12' GE₆ 15 ina ZÁLAG dele-bat e MÚL KUR šá KIR₄ šil-ta_h PA 1+[x KÜŠ [...]
 13' [...] '2' KÜŠ² 'x x' GE₆ 7 ina ZÁLAG dele-bat e M[ÚL IGI šá SUHUR MÁŠ [...]

'Rev.'

- 1' [...] 'AN² e MÚL ár² šá še-pít MAŠ-MAŠ¹ [...]
 2' SIG MAŠ-MAŠ IGI 4 KÜŠ SIG 1 18 na AN [...]
 3' 6 SI ana ULÛ SIG IGI TUR 16,40 na-s[u [...]
 4' GE₆ 23 ina ZÁLAG AN e SA₄ ABSIN 1 KÜŠ [...]
 5' GAN GE₆ 6 ina ZÁLAG AN SIG RÍN šá SI 2 KÜŠ [...]
 6' AB GE₆ 6 ina ZÁLAG AN e SI₄ 2 KÜŠ G[E₆ [...]
 7' [ZÍZ] AN ina PA ŠE AN EN 10 ina PA GE₆ 10+[x [...]
 8' [GE₆] 25 ina ZÁLAG AN e MÚL 'ár¹ šá SU[HUR MÁŠ [...]

I

- 9' [MU-2]-me-28-K[AM [...]

Comments

Note the remarks about the planets' entering zodiacal signs.

Obv. 5': on I 16 Venus was near α Geminorum.

7': on II 29, Venus was near ρ Leonis.

8': on III 20, Venus was near β Virginis.

10': on VII 22, Venus reached Libra.

11': on VIII 30, Venus was near β Scorpis.

13': on XI 7, Venus was near γ Capricorni.

Rev. 6': in the broken part of the line, a conjunction with θ Ophiuchi was listed.

9': this line begins the lunar part, which is divided into (probably four) columns.

No. 91

Rm 763 + 946

Copy: LBAT 1301 (Rm 763)

Photo: Pl. 61

Goal year: SE 246

Upper edge

- 1 ina a-mat ^dEN u ^rdGAŠAN-ia¹ [liš-lim]

Obv.'

- 1 MU-1-me-1,15-[KA]M ¹A[r-šá-ka-a LUGAL [...]
 2 in 6 ina TIL zib^{me} IGI [...]
 3 šá SAG HUN 4 KÜŠ 'x' [...]
 4 ár MÚL ár-ú šá S[AG HUN [...]
 5 DU₆ in 10 MÚL-BABBAR [ana ME E-a [...]

- 11' 2 cubits below β Librae. Around the 23rd, Venus reached Scorpius. Night of the 30th, last part of the night, [...]
 12' Night of the 15th, last part of the night, Venus was 1+[x cubits] above θ Ophiuchi [...]
 13' [...] 2 cubits¹ [...] ..., night of the 7th, last part of the night, Venus was [...] above [γ Capricorni [...]

'Rev.'

- 1' [...] Mars was [...] above μ¹ Geminorum [...]
 2' 4 cubits below α Geminorum. Month III, the 1st, sunset to setting of Mars: 18° [...]
 3' first appearance [...], being 6 fingers low to the south; it was small, rising of Mars to sunrise: 16° 40' [...]
 4' Night of the 23rd, last part of the night, Mars was 1 cubit above α Virginis [...]
 5' Month IX, night of the 6th, last part of the night, Mars was 2 cubits below β Librae [...]
 6' Month X, night of the 6th, last part of the night, Mars was 2 cubits above α Scorpis. Ni[ght [...]
 7' [Month XI,] Mars was in Sagittarius. Month XII, Mars was until the 10th in Sagittarius. Night of the 10+[xth, [...]
 8' [Night] of the 25th, last part of the night, Mars was [...] above δ Cap[ricorni.]

I

- 9' [Year 2]28 [...]

No. 91

Upper edge

- 1 At the command of Bel and Beltija may it go well.

Obv.'

- 1 Year 175. [king] A[rsaces [...]
 2 around the 6th, (Jupiter's) first appearance in the end of Pisces [...]
 3 4 cubits [below] [β¹] Arietis [...]
 4 [it became stationary] behind α Ar[ietis.]
 5 Month VII, around the 10th, Jupiter's [acronychal rising [...]

- 6 1½ KÙŠ ár MÚL KUR [šá DUR nu-nu UŠ....]
 7 [š]á SAG HUN 4 KÙŠ [... DIR-ŠE]
 8 [i]n 20 MÚL-BABBAR ina T[IL HUN ŠÚ]
 9 [M]U-1-me-1-šu-2-KAM ZÍZ i[n]
 10 MU-1-me-1-šu-3-KAM ¹A-l[ek-sa-an-dar LUGAL]
 11 'x' GE₆ '15' ina ZÁLAG MÚL-[BABBAR]
 12 4 [x] 'MÚL-BABBAR' SIG [...]
 13 'x' [...]

Rev.

- I
 1' ZÍZ 12,20 ŠÚ 'na'
 2' 10,10 ME GE₆
 3' 'ŠE' 10 UŠ ŠÚ na
 4' [x]+1,30 ME GE₆
 5' [GU₄ x] AN-KU₁₀ šámaš
 6' [ki PAP NU] IGI in 1,15
 7' [ME N]IM-a
 8' [SIG x] AN-KU₁₀ sin šá DIB
 9' 'in' 19 ME ana ŠÚ šámaš
 10' APIN 28 AN-KU₁₀ šámaš
 11' la-pàn DIR NU PAP
 12' in 5 UŠ GE₆ ana ZÁLAG
 13' [GAN x] AN-KU₁₀ sin šá 'DIB'
 14' in (blank)

II

- 1' [BAR] '30 x' [...]
 2' 14 50 NINDA Š[Ú]
 3' 15 5,30 M[E]
 4' 15 8,20+[x] na
 5' 16 11,10+[x] GE₆
 6' 27 'x' [...]
 7' GU₄ 1 10+[x]
 8' 13 'x' [...]
 9' 14 10+[x]
 10' 14 1+[x]
 11' 15 'x' [...]
 12' 28 [...]

- 6 [it became stationary] 1½ cubits behind η [Piscium]
 7 4 cubits [below β/α] Arietis [... Month XII₂.]
 8 around the 20th, Jupiter's [last appearance] in the e[nd of Aries.]
 9 Year 162, month XI, ar[ound]
 10 Year 163, [king] Al[exander]
 11, night of the 15th¹, last part of the night, Jupi[ter]
 12 the 4th, [...] Jupiter was [...] below [...]
 13 ... [...]

Rev.

- I
 1' Month XI, 'moonset to sunrise' (plus) 'sunrise to moonset': 12° 20'.
 2 'moonrise to sunset' (plus) 'sunset to moonrise': 10° 10'.
 3' Month XII, 'moonset to sunrise' (plus) 'sunrise to moonset': 10°.
 4' 'moonrise to sunset' (plus) 'sunset to moonrise': [x]+1° 30'.
 5' [Month II,] solar eclipse;
 6' [when I watched I did not] see it. At 75°
 7' [after sun]rise.
 8' [Month III,] lunar eclipse which was omitted.
 9' At 19° before sunset.
 10' Month VIII, the 28th, solar eclipse;
 11' on account of clouds I did not watch.
 12' At 5° before sunrise.
 13' [Month IX,] lunar eclipse which was omitted.
 14' At (blank)

II

- 1' [Month I,] (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) ... [...]
 2' The 14th, moonset to sunrise: 50'; [...]
 3' The 15th, moonrise to sunset: 5° 30'; [...]
 4' The 15th, [sunrise to moonset:] 8° 20+[x';]
 5' The 16th, [sunset to moonrise:] 11° 20+[x';]
 6' The 27th, [moonrise to sunrise:] ... [...]
 7' Month II, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 10+[x°;]
 8' The 13th, [moonset to sunrise:] ... [...]
 9' The 14th, [moonrise to sunset:] 10+[x°;]
 10' The 14th, [sunrise to moonset:] 1+[x°;]
 11' The 15th, [sunset to moonrise:] ... [...]
 12' The 28th, [...]

Colophon (on upper edge)

1 U₄-1-'KAM' [...]

Left edge

1 in 24 [...]

Comments

Obv. 2: usually, the planet's name is mentioned after the day number; so the wording preserved here may refer to an ideal first appearance: '(ideal) first appearance on the 6th in the end of Pisces', while the actual observation took place later, with the planet already in Aries.

3: it seems that a 'conjunction' is included here (also in l. 7), which ought to be the topic of the following section.

4: a position behind α Arietis would fit the eastern stationary point of Jupiter.

6: the western station took place about 3° in longitude to the east of η Piscium.

Rev. 1 8f.: lunar eclipse of -83 Jun 23.

10-12: solar eclipse of -83 Dec 3.

13f.: lunar eclipse of -83 Dec 17.

No. 92

BM 33522 + 33569 + 33580 + 33814 (= Rm 4,78+125+136+374) + unnum.

Photo: Pl. 62

Goal year: SE 247

Upper edge

1 ina a-mat dEN u dGAŠ[AN]-iá liš-lim

Obv.

1 M[U-1]-me¹-[1,16-KAM] 'x x x x x' [x x BAR² i]n² 20+'x' MÚL-BABBAR¹ [x] 'x x x x x x' [...]

2 [ana] 'NIM' ki-i UŠ-'ú x x ina IGI x [x (x)] 'x x x' UŠ² NU² PAP² DU₆ 10+[x¹....]

3 MÚL-BABB[AR] ana ŠÚ ki-i 'UŠ-a x x x' [x x x x x ana²] 'NIM' DIB¹ UŠ

4 [MU-1-me]-1-šu-4-KAM 'x x x x x x' [...]' 'x x x x' [...]' 'x x'

5 [x x x] 'x x x' [x x] 'x x x x x x x' [...]' 'x x x x x'

6 [...]' 'x' [x x] 'x x x x x x' [...]' IGI 'x x x' [...]

7 'x x' [x] 'x x x x x x x' [...]' IZI GE₆ 6 USAN dele-bat [...]

8 [x x x GE₆] 'x USAN' [dele-bat] 'x x x ½ KÜŠ² x' [x x x x x] dele-bat SIG 'MÚL' KUR šá 'KIR₄ šil' [PA]

9 [x x x x] 'x x' [x x x x x] GE₆ 17 US[AN dele-bat SIG MÚL á]r šá SAG HUN 'x' [...]

10 'x x x'

Colophon (on upper edge)

1 First days, [...]

Left edge

1 At 24° [...]

No. 92

Upper edge

1 At the command of Bel and Beltija may it go well.

Obv.

1 Ye[ar] 1[76] [.... Month I², ar]ound² the 20+xth, Jupiter's [....]

2 when it became stationary to the east, it became stationary ...; I did not watch. Month VII, the 10+[xth,]

3 when [Jupi]ter became stationary to the west, it became stationary ... [....] having passed² [....] to the east.

4 [Year 1]64, [....] ... [....]

5 [....] [....] [....]

6 [....] [....] first appearance [....] [....]

7 [.... Month V.] night of the 6th, first part of the night, Venus [....]

8 [.... Night] of the xth, first part of the night, [Venus was] ½ cubit² [....] Venus was [....] below θ Ophiuchi [....]

9 [....] [....] Night of the 17th, first part [of the night, Venus was below] α Arietis [....]

10

- 11 [MU]-¹2-me²¹-1-KAM ¹Ar-šá-kam <LUGAL> BAR 4 G[U₄-UD] IGI NIM 'x+7
na¹-su in '3²¹ IGI [....]
12 [x (x)] 'x 5¹ KÜŠ² GE₆ 16 US[AN GU₄-UD SIG š]ur GIGIR šá SI 1 2/3 KÜŠ GE₆ 18
USAN GU₄-UD 'e šur GIGIR¹ [šá ULÜ nn mm]
13 [GU₄ GE₆ x] USAN GU₄-UD 'e¹ [MAŠ-MAŠ šá] 'SIPA¹ 4 KÜŠ in 11 GU₄-UD ina ŠÚ
ina MAŠ-MAŠ ŠÚ NU PAP SIG 'x¹ [....]
14 [....] 'x x¹ [.... x]+1 ŠÚ šá GU₄-UD ina NIM ina SAG ALLA TA 28 šá SIG ki PAP [NU
IGI]
15 [....] 'x x x x¹ in 30² GU₄-UD ina ŠÚ ina TIL ABSIN ŠÚ² 'x x¹ [....]
16 (traces)

Rev.

I

- 1' 'x¹ [....]
2' SIG x [....]
3' BAR DIB in
4' 5 UŠ ME NIM-a
5' APIN GE₆ 13 AN-KU₁₀ s[in]
6' 5 ÁB BAR DIB in
7' 1,13 GE₆ ana ZÁLAG
8' 28 AN-KU₁₀ šámaš
9' ki PAP NU IGI
10' in 1 ME ana ŠÚ šámaš

Colophon

- 11' U₄-1-KAM IGI-DU₄-[A^{meš}]
12' ¹Ar-šá-kam LUGAL LUGAL^{meš} u f? [....]

Date

The obverse is badly damaged. The date is based on reading 1-šú-4 in line 4, introducing the second Jupiter section, which is from 83 years before the goal year. Since the king's name Arsaces is preserved in the colophon, year 64 of the Seleucid era is too early to yield a goal year within the Parthian period. By adding 100, a suitable reading is found; the data in the first Jupiter section (ll. 1-3, year 176), the Mercury section (ll. 11-16, year 201), and the eclipses (rev. 1'-10', year 229) fit the respective computations.

Comments

Obv. 2: the date in month VII in the broken part of the line must refer to acronychal rising (computation VII 26).

3: second stationary point was on IX 26, a little before α Tauri.

Rev. 2'-4': lunar eclipse of -82 June 13.

5'-7': lunar eclipse of -82 Nov. 7.

- 11 [Year] 201, <king> Arsaces. Month I, the 4th, Mer[cury's] first appearance [....] it
was high, sunset to setting of Mercury: x+7°; (ideal) first appearance on the 3rd² [....]
12 [....] 5 cubits². Night of the 16th, first part of [the night, Mercury was] 1 2/3 cubits
[below] β Tauri. Night of the 18th, first part of the night, Mercury was [....] above ζ
Tau[ri].
13 [Month II, night of the xth,] first part of the night, Mercury was 4 cubits above [γ]
Geminorum. Around the 11th, Mercury's last appearance in the west in Gemini; I did
not watch. Month III, the xth, [....]
14 [....] [.... the x]+1st, Mercury's last appearance in the east in the beginning of
Cancer: from the 28th of month III when I watched [I did not see it]
15 [....] Around the 30th², Mercury's last appearance in the west in the end of Virgo
[....]
16

Rev.

I

- 1' [....]
2' Month III, [....]
3' BAR, omitted. At
4' 5° after sunrise.
5' Month VIII, night of the 13th, lunar eclipse
6' (after) 5 months, BAR, omitted. At
7' 73° before sunrise.
8' The 28th, solar eclipse;
9' when I watched I did not see it.
10' At 60° before sunset.

Colophon

- 11' First days, appearances, [....]
12' Arsaces king of kings, and [....]

No. 93

BM 33533 (= Rm 4,89)

Photo: Pl. 62

Goal year: SE 247

Flake

1' [...] 'UŠ²¹ [...]2' [MU-1-me-1,]39-KAM ŠE 'x¹ [... ŠE DIR]3' [MU-2-me-KAM] 'Ar-šá-kam LUGAL LUGAL^{rmeš1} [...]4' [...] GAN] GE₆ 25 USAN AN SIG MÚ[L ár šá SAG HUN [...]5' [...] AN] 'e¹ is le₁₀ 2½ KÜŠ ŠE [...]

6' [...] e šur GIGIR šá] ULÙ 1½ KÜŠ

Lower edge

illegible

Comments

The date of the Mars section has to be in the Parthian period (Arsaces mentioned); of the preceding year, just '39' is preserved in line 2'. This leaves the possibilities SE 199, 239, 299, 339 (later dates need not be considered). The year can be restored as SE 199 from the condition that (during the following year) Mars has to be above α Tauri just before month XII. The day number in line 3' fits this assumption if the star is restored as α Arietis. However, the title 'king of kings' is not attested before SE 203; in SE 201, the title is still attested as 'king' only (I owe this information to G. R. F. Assar). Therefore, the title given here has to be considered an error which may have been caused by the title 'king of kings' expected for the goal year SE 247 in the colophon line. If the date is correct, the tablet could be part of BM 33522+.

No. 94

BM 42148 (= 81-6-25, 771)

Copy: LBA 1303

Photo: Pl. 62

Goal year: SE 255

Obv.

1 MU-2-me-9-KAM BAR GE₆ [x] U[SAN [...]2 šá GU₄-UD ina ŠÚ ina MÚL-MÚL TA '10' k[i PAP NU IGI [...]3 [x x n]a-su in 20 IGI¹ SIG '5²¹ [...]4 [...] 'x x¹ [...]

No. 93

Flake

1' [...] became stationary² [...]

2' [Year 1]99, month XII, ... [... Month XII was intercalary.]

3' [Year 200,] Arsaces king of kings. [...]

4' [... Month IX,] night of the 25th, first part of the night, Mars was [...] below [α Arietis ...]

5' [... Mars was] 2½ cubits above α Tauri. Month XII, [...]

6' [...] 1½ cubits [above ζ Tauri.]

Lower edge

illegible

No. 94

Obv.

1 Year 209, month I, night of [the xth,] first [part of the night, ...]

2 Mercury's [last appearance] in the west in Taurus: from the 10th, wh[en I watched I did not see it ...]

3 rising of Mercury to sunrise: [...]; (ideal) first appearance on the 20th. Month III, the 5th², [...]

4 [...] [...]

Rev.

- 1' [x] 'x x x' [...]
 2' ZÍZ 2 AN *ana* ME E-a G[E₆]
 3' ŠE 10 *ina* 15 A U[Š]

Comments

The data preserved for Mars fit the year SE 176, as is to be expected if the Mercury section implies a Goal year of SE 255. The format of the fragment does not correspond to a Goal year text but rather is similar to collected planetary observations.

No. 95

DT 207

Photo: Pl. 63

Goal year: SE 256

Flake

- 1' [... *dele-b*]at SIG SAG A 3 [KÜŠ *dele-bat*]
 2' [SIG GIŠ.KUN A] 5 KÜŠ DU₆ GE₆ 1 *ina* ZÁ[LAG *dele-bat e* GÌR *ár šá* A nn mm]
 3' [APIN] GE₆ 21 *ina* ZÁLAG *dele-bat e* RÍN *šá* [ULÙ nn mm *dele-bat*]
 4' [e] SI₄ 2 KÜŠ GE₆ 12 *ina* ZÁLAG *dele-bat* 'e' [...]
 5' [DI]R²-ŠE GE₆ 18 USAN *dele-bat* SIG GU₄-UD²
 6' [M]U-2-me-10-KAM 'Ar-šá-kam LUG[AL LUGAL^{meš}]
 7' 'x x x' [x x] 'x x' USAN¹ [...]
 8' 'x' [...]'x x' [...]

Date

The first preserved section is that for Venus; the following, of which little less than the year number remains, must be the one for Mercury; it is dated to SE 210. Then the goal year is SE 256; the Venus data have to be for SE 248. What is preserved fits for the most part: there was a period of invisibility between disappearance in the east and reappearance in the west between lines 4' and 5'. If the sign at the beginning of line 5' is correctly restored as DIR, Venus happens to be close to Mercury and to η Tauri on XII₂ 18, although from computation I would prefer the date XII₂ 19 for these passings. Unfortunately, on XII 18 too, Venus passed Mercury. So it is not possible to exclude that my reading of the first sign of line 5' is incorrect.

The other lines can be restored so as to satisfy situations in the sky in SE 248. Probably two passings of Normal Stars are to be restored in the broken right part of lines 1'-3'. In line 4', last and first appearance are to be restored. The conjunction with α Scorpii (l. 4') took place at the beginning of month IX, so no month name is required for the following observation on the 12th, which must have referred to θ Ophiuchi. Only line 3' has an erroneous 21st instead of the 11th for Venus passing α Librae.

Rev.

- 1' [...] [...]
 2' Month XI, the 2nd, Mars' acronychal rising. Ni[ght]
 3' Month XII, the 10th, it became stationary on the right side of Leo [...]

No. 95

DT 207

Flake

- 1' [... Venu]s was 3 [cubits] below ε Leonis. [... Venus was]
 2' 5 cubits [below θ Leonis.] Month VII, night of the 1st, la[st part of the night, Venus was above β Virginis]
 3' [Month VIII,] night of the 21st, last part of the night, Venus was [...] above α Lib[rae Venus was]
 4' 2 cubits [above] α Scorpii. Night of the 12th, last part of the night, Venus was [...] above [θ Ophiuchi]
 5' Month XII₂, night of the 18th, first part of the night, Venus was [.... below Mercury?]
 6' Year 210, Arsaces king [of kings]
 7' [...] first part of the night, [...]
 8' [...] [...]

Undated Goal Year Texts

No. 96

BM 32342 (= S+ 76-11-17, 2074)

Photo: Pl. 63

'Obv.'

- 1' [...] 'GE₆¹ 10+[x]
 2' [...] *dele-bat e* SA₄ [...]
 3' [...] GE₆ 11 *ina* ZÁLAG *dele-bat e* MÚL *e* š[á]
 4' [...] *e* MÚL KUR šá KIR₄ šil PA 1 KÙŠ [...]
 5' [...] G]E₆ 18 *ina* ZÁLAG *dele-bat e* MÚL ár šá SUH[UR MÁŠ]
-
- 6' [...] *i*n 14 GU₄-UD *ina* NIM UD-DA ŠÚ-šú [DIB]
 7' [...] 'x¹ GE₆ 29 USAN GU₄-UD SIG MAŠ-[MAŠ]
 8' [...] 'USAN¹ GU₄-UD SIG SAG A 4 KÙŠ G[E₆²]
 9' [...] 'NU PAP¹ *in* 25 GU₄-UD [...]
 10' [...] *ina* N]IM 'ina GÍR-TAB ŠÚ¹ [...]

'Rev.'

III

- 1' [...] 'x¹
 2' [...] *ana*] šámaš SIG
 3' [x x ŠÚ] *muš*
 4' [x x] ME *muš*
 5' [x x]+2 *na muš*
 6' [x x]+4 GE₆ *muš*
 7' [x] 'x¹ KUR *muš*
 8' [MN] '30¹ 9 *ma-diš* SIG
 9' [x] 'x¹ *muš ana šámaš* SIG
 10' [x x] 'ŠÚ¹ *a-kam muš*
 11' [x x x] *muš*

II'

- 1' 'ZÍZ 30¹ [...]
 2' *i-ša* [...]
 3' 13 6 ŠÚ [...]
 4' 14 3 *n[a*]
 5' 15 10+[x ME]
 6' 16 10+[x GE₆]
 7' 27¹ 10+[x KUR]
 8' ŠE '30¹ [...]
 9' 14 'x¹ [...]
 10' 'x¹ [...]

No. 96

'Obv.'

- 1' [...] Night of the 10+[xth,]
 2' [...] Venus was [...] above α [Virginis]
 3' [...] Night of the 11th, last part of the night, Venus was [...] above β Sc[orpii]
 4' [...] Venus was] 1 cubit above θ Ophiuchi [...]
 5' [...] Ni]ght of the 18th, last part of the night, Venus was [...] above δ Capri[corni]
-
- 6' [...] Ar]ound the 14th, Mercury's last appearance in the east, [omitted]
 7' [...] Night of the 29th, first part of the night, Mercury was [...] below [α/β] Gemi[norum]
 8' [...] first part of the night, Mercury was 4 cubits below ε Leonis. Ni]ght¹
 9' [...] I did not watch. Around the 25th, Mercury's [...]
 10' [...] Mercury's] last appearance in the east in Scorpius [...]

'Rev.'

III

- 1' [...]
 2' [...] low to the sun
 3' [The xth, moonset to sunrise:] measured.
 4' [The xth,] moonrise to sunset: [...], measured.
 5' [The xth,] sunrise to moonset: [x]+2°, measured.
 6' [The xth,] sunset to moonrise: [x]+4°, measured.
 7' [The xth,] moonrise to sunrise:, measured.
 8' [MN,] (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 9°, it was very faint;
 9', measured: it was low to the sun.
 10' [The xth,] moonset to sunrise: [...]; measured (despite) mist.
 11' [The xth,,] measured.

IV

- 1' Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]
 2' a little [...]
 3' The 13th, moonset to sunrise: 6° [...]
 4' The 14th, sunrise to moonset: 3° [...]
 5' The 15th, [moonrise to sunset:] 10+[x°]
 6' The 16th, [sunset to moonrise:] 10+[x°]
 7' The 27th¹, [moonrise to sunrise:] 10+[x°,]
 8' Month XII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]
 9' The 14th. [...]
 10' The xth, [...]

No. 97

BM 32358 (= S+ 76-11-17, 2090)

Photo: Pl. 63

'Side A'

Left col.

- 1' [...] 'x x x x'
 2' [...] *ina* 20 ME *ana* ŠÚ *šamáš*
 3' [GE₆] '2¹⁹ šá DIB *ina* 1 GE₆ GIN
 4' [MN] GE₆ 14 8,50³ 'ME x x x'
 5' [x] 'E²-ú² 2 x x x x'
 6' [(x)] *ina* 16 GE₆ TA U[LÚ]
 7' [*ana*] KUR ZÁLAG *ina* 36 'x' [x x]

Right col.

- 1' 'x' [...]
 2' U[Š' [...]
 3' *ina* [...]
 4' 'x' [...]

'Side B'

Left col.

- 1' [...] 'muš'
 2' [...] mu[š]
 3' [...] 'DIR NU PAP'
 4' [...] 'x' muš
 5' [...] 'x x muš'
 6' [...] 'x muš'
 7' [...] 'muš'

Right col.

- 1' 10+[x]
 2' 20+[x]
 3' KIN² [...]
 4' 13 [x ŠÚ]
 5' 14 [x ME]
 6' 14 '5¹¹ [na]
 7' 15 [x GE₆]

Comments

Since eclipse reports and Lunar Six are on different sides of the tablet, and no planetary data preserved, this may not be a Goal-year text in the strict sense.

No. 97

'Side A'

Left col.

- 1' [...]
 2' [...] At 20° before sunset.
 3' [Night² of the] 29th², (solar eclipse) which was omitted. At 1° after sunset.
 4' [MN,] night of the 14th, moonrise to sunset²: 8° 50⁴.
 5' [...]
 6' [...] in 16° of night it cleared from south
 7' [to] east. At 36° [...]

Right col.

- 1' [...]
 2' [...]
 3' at [...]
 4' [...]

'Side B'

Left col.

- 1' [...] measured.
 2' [...] measu]red².
 3' [...] clouds, I did not watch.
 4' [...], measured.
 5' [...], measured.
 6' [...], measured.
 7' [...], measured.

Right col.

- 1' The 10+[xth,]
 2' The 20+[xth,]
 3' Month VI², [...]
 4' The 13th, [moonset to sunrise:]
 5' The 14th, [moonrise to sunset:]
 6' The 14th, [sunrise to moonset:] 5°² [...]
 7' The 15th, [sunset to moonrise:]

No. 98

BM 32426 (= 76-11-17, 2161)

Photo: Pl. 63

Flake

II

- 1' [...] PAP²
 2' [...] *a-kam muš*
 3' [...] *a-kam muš*
 4' [...] GE₆
 5' [...]
 6' [...] *ina*² GU]B² IGI

III

- 1' [...] x]+20 GE₆
 2' '26¹ 20,30 *muš*
 3' APIN 1 11+'x¹ *muš ana šámaš* SIG
 4' 12 9 ŠÚ NU PAP
 5' 13 8 ME *muš*
 6' 13 8,10 *na muš*
 7' 14 4,50 GE₆ DIR NU PAP
 8' 27 9,30 DIR NU PAP

IV

- 1' 1[3 [...]
 2' [13 [...]
 3' 14 [...]
 4' 14 [...]
 5' 27² [...]
 6' ZÍZ [...]

No. 99

BM 32434 (= 76-11-17, 2170)

Photo: Pl. 63

Flake

- 1' [...] ŠE¹ 'x¹ [...]
 2' [...] *šá* A 'x¹ [...]
 3' [...] 'x¹ 5 GENNA [...]
 4' [...] *šá*² A 8 SI [...]
 5' [...] *šá* ULÛ [...]

Other side blank as far as preserved.

No. 98

Flake

II

- 1' [...] watch¹.
 2' [...] measured (despite) mist.
 3' [...] measured (despite) mist.
 4' [...] sunset to moonrise: [...]
 5' [...]
 6' [...] it could be seen while (the sun) stood there.

III

- 1' [...] sunset to moonrise: [x]+20'.
 2' The 26th, (moonrise to sunrise:) 20° 30', measured.
 3' Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 11+x°, measured; it was low to the sun.
 4' The 12th, moonset to sunrise: 9°, I did not watch.
 5' The 13th, moonrise to sunset: 8°, measured.
 6' The 13th, sunrise to moonset: 8° 10', measured.
 7' The 14th, sunset to moonrise: 4° 50'; clouds, I did not watch.
 8' The 27th, (moonrise to sunrise:) 9° 30'; clouds, I did not watch.

IV

- 1' The 1[3th, [...]
 2' [The 13th, [...]
 3' The 14th, [...]
 4' The 14th, [...]
 5' The 27th¹, [...]
 6' Month XI, [...]

No. 99

Flake

- 1' [...] Month XII¹ [...]
 2' [...] Leonis¹ [...]
 3' [...] ..., the 5th, Saturn [...]
 4' [...] 8 fingers [...] Leonis. [...]
 5' [...] southern [...]

No. 100

BM 32457 (= 76-11-17, 2194)

Photo: Pl. 64

Flake

I'

- 1' [x x]+12 KUR *a-¹kam¹* [...]
 2' [MN] 30 13 *na-su* KUR₄ *'muš¹*
 3' [14] 5,40 ŠÚ DIR NU PAP
 4' [15] 7 ME DIR *muš*
 5' [15] 5,30 *na {x} muš*
 6' [1]6 7 GE₆ DIR *muš*
 7' [2]8¹ 13,30 KUR DIR *muš*
 8' [MN x 1]6 *na-su* KUR₄ *muš*
 9' [x x] ŠÚ DIR *m[uš]*

II'

- 1' 'x¹ [...]
 2' '13¹ [x ME [...]
 3' '13¹ [x ŠÚ [...]
 4' '14¹ [x GE₆ [...]
 5' '14¹ [x *na* [...]
 6' 20+[x [...]

No. 101

BM 32512 (= 76-11-17, 2253+2258)

Photo: Pl. 65

'Obv.

- 1' [...] 'x x¹ [...]
 2' [...] 'x¹ 8 SI 'x¹ [...]
 3' [...] 'šá SAG HUN¹ 3½ KÜŠ GE₆ 18¹ [...]
 4' [...] K]ÜŠ ŠE GE₆ 4 USAN *dele-bat e* [...]
 5' [...] šá 'ALLA¹ šá ULÜ¹ 1½ KÜŠ GE₆ 10+[x [...]
 6' [...] 'x¹ GE₆ 29 USAN *dele-bat 'e¹* [...]
 7' [...] 'x x¹ ŠÚ 'DIR¹ NU PAP GU₄ x¹ [...]
 8' [...] IZI¹ GE₆ '6¹ USAN G[U₄-UD [...]
 9' [...] 'GIŠ.KUN A ½ KÜŠ *ana* ŠÚ LAL IGI KUR¹ [...]
 10' [...] AP]IN¹ 20 GU₄-UD *ina* NIM *ina* PA IGI TUR 11 [*na-su* [...]
 11' [...] 'x x x¹ 28 GU₄-UD 'ina x¹ [x x x] 'x x¹ [...]

No. 100

Flake

I'

- 1' [...] moonrise to sunrise: [x]+12°; mist [...]
 2' [Month [...]] (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 13°; it was bright, measured.
 3' [The 14th,] moonset to sunrise: 5° 40'; clouds, I did not watch.
 4' [The 15th,] moonrise to sunset: 7°; measured (despite) clouds.
 5' [The 15th,] sunrise to moonset: 5° 30', measured.
 6' [The 1]6th, sunset to moonrise: 7°; measured (despite) clouds.
 7' [The 2]8th¹, moonrise to sunrise: 13° 30'; measured (despite) clouds.
 8' [Month [...]] sunset to moonset: 16°; it was bright, measured.
 9' [The xth,] moonset to sunrise: [...] measured (despite) clouds.

II'

- 1' [...]
 2' The 13th, [moonrise to sunset:]
 3' The 13th, [moonset to sunrise:]
 4' The 14th, [sunset to moonrise:]
 5' The 14th, [sunrise to moonset:]
 6' The 20+[xth, moonrise to sunrise:]

No. 101

'Obv.'

- 1' [...] [...]
 2' [...] 8 fingers [...]
 3' [...] 3½ cubits [below β, α] Arietis. Night of the 18th¹. [...]
 4' [...] cu]bits. Month XII. night of the 4th. first part of the night. Venus was [...] above [...]
 5' [...] 1½ cubits [...] θ/δ] Cancri. Night of the 10+[xth.]
 6' [...] Night of the 29th, first part of the night, Venus was [...] above [...]
 7' [...] Mercury's last appearance I did not watch. Month II. [...]
 8' [...] Month V¹. night of the 6th¹. first part of the night. Mer[cury was]
 9' [...] first appearance [...] θ Leonis. being ½ cubit back to the west: it was bright. [...]
 10' [...] Mon]th VIII¹, the 20th, Mercury's first appearance in the east in Sagittarius; it was small. [rising of Mercury to sunrise:] 11° [...]
 11' [...] The 28th. Mercury's [...] in [...]

- 12' [... i]n² 25 GU₄-UD ina NIM ina HUN IGI² [x] 'x x x¹ [na]-su¹ [...]
- 13' [... USA]N GENNA SIG² 'x x 8² SI² x x¹ [...]
- 14' [...] 'x¹ APIN 23² ŠÚ² šá GENNA ina [x TA] 24² ki [PAP NU IGI [...]
- 15' [...] 'x¹ na-su in¹ 30² šá ita GAN² IGI² 'x x¹ [...]
- 16' [...] (blank)
- 17' [...] 'x¹ in 16² 'AN² x¹ ina x 'x x x x¹ [...]
- 18' [...] 'x MAŠ-MAŠ x¹ [x] 'x¹ GE₆ 9 'USAN² [...]
- 19' [...] 'x x x x¹ [x x] 'x x x x¹ [...]
- 20' [...] DU₆² GE₆ 3 'USAN² AN¹ [...]
- 21' [...] 'x¹ DELE 'šá² IGI² ABSIN² x¹ [...]
- 22' [...] (blank)

Lower edge preserved, traces of writing

Rev.

I broken;

II

(occasional ends of lines)

1' [...] muš²

2' [...] muš²

(break)

1'' [...] NU PAP

2'' [...] 'ki² PAP NU IGI

3'' [...] KUR² muš

4'' [...] 'x¹ muš

5'' [...] 'x¹

III

1 [ŠU [...]

2 [1]2 8², 20 Š[Ú² [...]

3 [1]3 8 [na [...]

4 [1]4 5,30 [ME [...]

5 [1]5 8 G[E₆ [...]

6 [2]7 20 KUR [...]

7 [I]ZI 30 10 'x¹ [...]

8 13 10+[x ME [...]

9 13 12² Š[Ú² [...]

10 [1]4 1,20 G[E₆ [...]

11-12 [...]

- 12' [...] ar]ound¹ the 25th, Mercury's first appearance in the east in Aries; [...] rising of Mercury to sunrise: [...]
- 13' [...] first part] of the night, Saturn was 8² fingers² below [...]
- 14' [...] Month VIII, the 23rd², Saturn's last appearance in [...: from] the 24th², when [I watched I did not see it]
- 15' [...] rising of Saturn to sunrise:; (ideal) first appearance on the 30th² of month IX [...]
- 16' [...] (blank)
- 17' [...] around the 16th², Mars' in [...]
- 18' [...] Geminorum Night of the 9th, first² part of the night, [...]
- 19' [...] [...]
- 20' [...] Month VII, night of the 3rd, first part of the night, Mars [...]
- 21' [...] γ² Virginis² [...]
- 22' [...] (blank)

Lower edge preserved, traces of writing

'Rev.'

I broken;

II

(occasional ends of lines)

1' [...] measured.

2' [...] measured.

(break)

1'' [...] I did not watch.

2'' [...] when I watched I did not see it.

3'' [...] moonrise to sunrise: [...] measured.

4'' [...] measured.

5'' [...]

III

1 [Month IV,]

2 [The 1]2th, moonset to sunrise: 8° 20' [...]

3 [The 1]3th, [sunrise to moonset:] 8° [...]

4 [The 1]4th, [moonrise to sunset:] 5° 30' [...]

5 [The 1]5th, sunset to [moonrise:] 8° [...]

6 [The 2]7th, moonrise to sunrise: 20° [...]

7 Month V, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 10° [...]

8 The 13th, [moonrise to sunset:] 10+[x° [...]

9 The 13th, moonset to [sunrise:] 12°² [...]

10 [The 1]4th, sunset to [moonrise:] 1° 20' [...]

11-12 [...]

- 13 'KIN' [...]
 14 13 [x ME ...]
 15 13 [x ŠÚ ...]
 16 14 [x GE₆ ...]
 17 14 10+[x na ...]
 18 27 [...]
 19 DU₆ 1 [...]
 20 12 [...]

No. 102

BM 32538 + 32603 (= S+ 76-11-17, 2280+2347)

Photo: Pl. 64

'Obv.'

- 1' [... MÚL-BA]BBAR e is 'le₁₀ 2+x' [KÙ]Š' [...]
 2' [...] (blank)
 3' [... še]-pít MAŠ-MAŠ 1½ KÙŠ
 4' [...] dele-bat e MAŠ-MAŠ šá SIPA 4 KÙŠ
 5' [... x]+1 KÙŠ GU₄ GE₆ 11 USAN dele-bat e MÚL ár šá ALLA šá ULÙ 1½ KÙŠ
 6' [...] 'x' GE₆ 18 USAN dele-bat SIG 'MÚL TUR šá 4 KÙŠ' ár LUGAL 4 U
 7' [...] SIG LUGAL 2 S[I']
 8' [...] SIG GIŠ.KUN [A nn K]ÙŠ
 9' [...] 'x' A[BSIN] [...]
 10' [...] RÍN šá ULÙ [...]
 11' [...] 'x' [...] e SI₄ 3 KÙŠ
 12' [...] 'x' [...] 'x'

'Rev.'

- 1' [...] 'x'
 2' [...] KÙŠ 6 U
 3' [...] (blank)
 4' [...] in EN 3
 5' [...] M]E E-a
 6' [...] MÚL-MÚL ŠÚ NU PAP
 7' [...] SIG] 'MAŠ-MAŠ' ár 3 KÙŠ
 8' [...] 'x'
 9' [...] x]+4' KÙŠ
 10' [...] 'e' SA₄ šá ABSIN 1½ KÙŠ
 11' [...] 4 KÙŠ
 12' [...] KI]R₄ šil PA 6 U

- 13 Month VI, [...]
 14 The 13th, [moonrise to sunset: ...]
 15 The 13th, [moonset to sunrise: ...]
 16 The 14th, [sunset to moonrise: ...]
 17 The 14th, [sunrise to moonset:] 10+[x° ...]
 18 The 27th, [...]
 19 Month VII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) [...]
 20 The 12th, [...]

No. 102

'Obv.'

- 1' [... Jupi]ter was 2+x [cubi]ts² above α Tauri [...]
 2' [...] (blank)
 3' [...] 1½ cubits [... η/μ] Geminorum
 4' [...] Venus was 4 cubits above γ Geminorum.
 5' [... x]+1 cubits. Month II, night of the 11th, first part of the night, Venus was 1½ cubits above δ Cancri.
 6' [...] Night of the 18th, first part of the night, Venus was 4 fingers below ρ Leonis.
 7' [...] Venus was] 2 fingers² below α Leonis.
 8' [...] Venus was nn] cubits below θ Leonis.
 9' [...] V[irginis] ...
 10' [...] α [Librae....]
 11' [...] [...] 3 cubits above α Scorpil.
 12' [...] [...]

'Rev.'

- 1' [...]
 2' [...] cubits 6 fingers.
 3' [...] (blank)
 4' [...] Around until the 3rd,
 5' [...] Saturn's] acronychal rising.
 6' [...] Mars'] last appearance in Taurus; I did not watch.
 7' [...] 3 cubits [below] β Geminorum.
 8' [...]
 9' [...] x]+4 cubits.
 10' [...] 1½ cubits above α Virginis.
 11' [...] 4 cubits
 12' [...] 6 fingers [... θ] Ophiuchi.

No. 103

BM 32547 (= S+ 76-11-17, 2290)

Photo: Pl. 65

Flake

I

- 1' [...] 'AN-KU₁₀¹
 2' [...] *i*n 13 ME NIM-*a*
 3' [x AN]-KU₁₀ *šámaš ki* PAP NU IGI
 4' [...] 20'¹
 5' [...] DI]R¹ *muš*
 6' [...] Ú

II

- 1' '27 x¹ [...]
 2' SIG 30 13 K[UR₄² [...]
 3' 14 4 ME D[IR x (x)]
 4' 14 30 NINDA ŠÚ DIR N[U PAP]
 5' 15 12,40 GE₆
 6' 15 12 *na muš*
 7' 27 14 *muš*
 8' [Š]U 1 19 KUR₄ *a-pir muš*
 9' [x] 6 ME *muš*
 10' [x x]+5 'ŠÚ¹ *m[uš]*

III

- 1' 20+[x [...]
 2' APIN 30 [...]
 3' [...]
 4' 13 1+[x x]

No. 104

BM 32616 (= 76-11-17, 2361)

Photo: Pl. 65

Flake (of obv.)

- 1' KIN 20 MÚL-BABBAR [*ina*] 'SAG RÍN¹ [ŠÚ [...]
 2' 24 MÚL-BABBAR *ana* NIM *ki* UŠ-[ú [...]
 3' MU-16-KAM GU₄ *in* EN 10+[x [...]
 4' *in* 3 MÚL-BABBAR *ina* GÍR-TAB I[GI¹ [...]

No. 103

Flake

I

- 1' [...] eclipse
 2' [...] At 13° after sunrise.
 3' [The xth,] solar eclipse; when I watched I did not see it.
 4' [...] 20'¹
 5' [...] measured (despite) clouds¹.
 6' [...]

II

- 1' The 27th. [...]
 2' Month III, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13°; it was b[right¹ [...]
 3' The 14th, moonrise to sunset: 4°; clou[ds [...]
 4' The 14th, moonset to sunrise: 30'; clouds, I did not [watch.]
 5' The 15th, sunset to moonrise: 12° 40'.
 6' The 15th, sunrise to moonset: 12°, measured.
 7' The 27th, (moonrise to sunrise:) 14°, measured.
 8' Month IV, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 19°; it was bright, earthshine, measured.
 9' [The xth,] moonrise to sunset: 6°, measured.
 10' [The xth,] moonset to sunrise: [x]+5°, mea[sured.]

III

- 1' The 20+[xth, [...]
 2' Month VIII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]
 3' [...]
 4' The 13th, [...] 1+[x° [...]

No. 104

Flake (of obv.)

- 1' Month VI, the 20th, Jupiter's [last appearance in] the beginning of Libra [...]
 2' The 24th, when Jupiter became stationary to the east, [...]
 3' Year 16, month II, around until the 10+[xth, [...]
 4' Around the 3rd, Jupiter's first appearance in Scorpius [...]

- 5' 1 KÙŠ 8 SI *ár* MÚL KUR š[á KIR₄ šil PA UŠ]
 6' MU-5-KAM ¹*An-ti-gu-[nu-us]*
 7' 'IZI' GE₆ 3 *ina* ZÁLAG MÚL-[BABBAR]
 8' (traces)

Comments

This text deals with two years of Jupiter data, SE 15 and 16 for phenomena, and Antigonus year 5 for passings of Normal Stars. The time difference between the two types of data is not 12 years, as expected in Goal year texts, but 16.

2': a first stationary point was reached in month VI.

3': at the end of month II, a second stationary point was reached.

4': computation yields VIII 5 for a first appearance in this year.

5': the position given must refer to a stationary point in the east.

7': on this date, Jupiter was above γ Geminorum.

No. 105

BM 32633 (= 76-11-17,2379)

Photo: Pl. 65

Flake

- 1' [...] 'x' [...]
 2' [...] IGI MÚL 'x' [...]
 3' [...] 'x' UŠ
 4' [...] *ina* LAL-šú e šur GIGIR šá U[LÙ]
 5' [...] KÙŠ GAN GE₆ 14 *ina* ZÁLAG M[ÚL-BABBAR]
 6' [...] GE₆ 6 USAN MÚL-BABBAR S[IG']
 7' [...] 2½ KÙŠ GE₆ 29 *ina* ZÁLAG [...]
 8' [...] *ina* ZÁLAG *dele-bat* SIG MÚL-MÚL '4' [...]
 9' [...] GE₆ 15 *ina* ZÁLAG *dele-bat e šur* GIGI[R]
 10' [...] GE₆ x]+8 *ina* ZÁLAG *dele-bat e* 'x' [...]

- 5' [it became stationary] 1 cubit 8 fingers behind θ [Ophiuchi]
 6' Year 5, Antigonus [...]
 7' Month V, night of the 3rd, last part of the night, Jup[iter]
 8' (traces)

No. 105

Flake

- 1' [...] [...]
 2' [...] in front of [...]
 3' [...] it became stationary [...]
 4' [...] Jupiter,] while moving back [to,] was [...] above ζ Tauri [...]
 5' [...] cubits. Month IX, night of the 14th, last part of the night, Ju[piter]
 6' [...] Night of the 6th, first part of the night, Jupiter was [...] be[low?]
 7' [...] 2½ cubits. Night of the 29th, last part of the night, [...]
 8' [...] last part of the night, Venus was 4 [...] below η Tauri [...]
 9' [...] Night] of the 15th, last part of the night, Venus was [...] above β/ζ Tauri [...]
 10' [...] Night of the x]+8th, last part of the night, Venus was [...] above [...]

No. 106

BM 32770 (= 76-11-17,2542)

Photo: Pl. 66

'Obv.

- 1' [...] 'is² le₁₀ 'x' [...]
 2' [...] šur GIGIR ša SI 1 KÙŠ 4² [SI [...]
 3' [...] K]ÙŠ GE₆ 14 USAN e² [...]

Rev.'

- I'
 1 [...] 'x' IGI² muš²
 2 [...] 'x'

II'

- 1 KIN 1 17² 'x x x'
 2 12 7 ŠÚ a muš
 3 13 6,30 ME muš
 4 [...] 'x' [...]

III'

- 1 AB [...]
 2 12 [...]
 3 12 [...]

No. 106

'Obv.

- 1' [...] α Tauri [...]
 2' [...] 1 cubit 4² [fingers] β Tauri. [...]
 3' [...] cu]bits. Night of the 14th, first part of the night, above' [...]

Rev.'

- I'
 1 [...], measured.
 2 [...]

II'

- 1 Month VI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17°,
 2 The 12th, moonset to sunrise: 7°, measured (despite) mist.
 3 The 13th, moonrise to sunset: 6° 30', measured.
 4 [...] [...]

III'

- 1 Month X, [...]
 2 The 12th, [...]
 3 The 12th, [...]

No. 107

BM 32941

Photo: Pl. 66

Flake

I'

- 1' [... mu]š
2' [...] muš
3' [... a]-kam muš
4' [... m]uš

II'

- 1' [... mu]š
2' [... m]uš
3' [... muš] ...
4' [... muš] ...
5' [... muš] ...
6' [... ana šamaš] SIG
7' [12 x]+30 'ŠÚ' muš
8' 13 4 na 'muš'
9' 14 40 NINDA ME mu[š]
10' 15 9,20 GE₆ muš
11' 26 21 KUR m[uš]
12' APIN 1 14 KUR₄ m[uš]
13' ina GUB IGI ana šamaš [...]
14' [...] 'x' [...]

III'

- 1' 'AB' [...] ...
2' 13 1+[x] ŠÚ ...
3' 14 3+[x] ME ...
4' 14 10 U[š] na ...
5' 15 10 UŠ GE₆ 'x'
6' 28 9,30 K[UR] ...
7' u a-kam 'x x'
8' ZÍZ 1 17,40 [...]
9' 12 'x' [...]
10' 'x' [...]

No. 107

Flake

I'

- 1' [... measu]red.
2' [...] measured.
3' [...] measured (despite) mist.
4' [... mea]sured.

II'

- 1' [...] measured.
2' [...] measured.
3' [...] measured.
4' [...] measured.
5' [...] measured.
6' [...] low [to the sun.]
7' [The 12th, moonset to sunrise: x°] 30', measured.
8' The 13th, sunrise to moonset: 4°, measured.
9' The 14th, moonrise to sunset: 40', measured.
10' The 15th, sunset to moonrise: 9° 20', measured.
11' The 26th, moonrise to sunrise: 21°, measured.
12' Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 14°; it was bright, mea[sured;]
13' it could be seen while (the sun) stood there; [it was] to the sun.
14' [...] [...]

III'

- 1' Month X, [...]
2' The 13th, [moonset to sunrise:] 1+[x°] ...
3' The 14th, [moonrise to sunset:] 3+[x°] ...
4' The 14th, [sunrise to moonset:] 10° [...]
5' The 15th, sunset to moonrise: 10° ...
6' The 28th, moonrise [ro sunrise:] 9° 30' [...]
7' and mist,
8' Month XI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17° 40' [...]
9' The 12th, [...]
10' [...]

No. 108

BM 32948 (= 78-5-31,37)

Photo: Pl. 66

Flake

- 1' [...] 'x' SIG 10' [...]
 2' [...] GEN]NA ina A IGI TUR' [...]
 3' [...] 'x' 26 GENNA ana ME [...]
 4' [...] IZI ina 29 GENNA 'x' [...]
 5' [...] 'x' ina SAG ABSIN UŠ
 6' [...] 'e' GİR ár šá A 14 SI
 7' [...] MÚ]L IGI šá ALLA šá SI
 8' [...] 'x x x'

No. 109

BM 32964 (= 78-5-31,53)

Photo: Pl. 66

Flake

- I
 1' [GAN x]+5, '50' Š[Ú u na]
 2' 10,40 ME [u GE₆]
 3' AB 14,10 ŠÚ u n[a]
 4' 16,50 ME u [GE₆]
 5' ZÍZ 9,20 Š[Ú u na]
 6' 16 [(x) ME u GE₆]
 7' ŠE [...]

No. 110

BM 33495 (= Rm 4, 50)

Photo: Pl. 66

Flake

- 1' (traces)
 2' [...] 'x' 4 ŠÚ šá GU₄-UD ina [...]
 3' [...] GU₄-UD SIG SAG A 1 KÜŠ 8 'SI' [...]
 4' [...] x IGI'
 5' [...] x]+14' GENNA ina SAG HUN IGI 20 na in 10+[x IGI [...]

No. 108

Flake

- 1' [...] Month III, the 10th' [...]
 2' [...] Sat]urn's first appearance in Leo; it was small', [...]
 3' [...] The 26th, Saturn's acronychal [rising]
 4' [...] Month V, around the 29th, Saturn's [...]
 5' [...] became stationary in the beginning of Virgo.
 6' [...] 14 fingers above β Virginis.
 7' [...] η Cancr.
 8' [...]

No. 109

Flake

- I
 1' [Month IX, 'moonset to [sunrise' plus 'sunrise to moonset': x]+5° 50'
 2' 'moonrise to sunset' [plus 'sunset to moonrise':] 10° 40'
 3' Month X, 'moonset to sunrise' plus 'sunrise to moonset': 14° 10'
 4' 'moonrise to sunset' plus ['sunset to moonrise':] 16° 50'
 5' Month XI, 'moonset to sunrise' [plus 'sunrise to moonset':] 9° 20'
 6' ['moonrise to sunset' plus 'sunset to moonrise':] 16° [(....)]
 7' Month XII [...]

No. 110

Flake

- 1'
 2' [...] the 4th, Mercury's last appearance in [...]
 3' [...] Mercury was 1 cubit 8 fingers below ε Leonis [...]
 4' [...] (ideal) first appearance [on] the xth'.
 5' [...] x]+14th, Saturn's first appearance in the beginning of Aries; rising of Saturn to sunrise: 20°; [(ideal) first appearance] on the 10+[xth']

- 6' [...] 'ana' ULÙ SIG UŠ 'DU₆' in 8 GENNA ana ME E-'a' [...]
 7' [...] EN' 1' GENNA [ana ŠÚ] 'ki-i UŠ'-a [x] 'x x' [...]
 8' [...] SIG MÚ]L KUR šá DUR nu-nu 3' KÙŠ ŠE in 26' [...]
 9' [...] 'x x x x x' [...]

No. 111

BM 33604 (= Rm 4,160)

Photo: Pl. 67

'Obv.

- 1' [...] 'x' [...]
 2' [...] 'x x x' GE₆ 10+[x ...]
 3' [...] GE₆ 3 ina ZÁLAG AN SIG MAŠ-MAŠ [...]
 4' [...] 4' SI' GE₆ 8 ina ZÁLAG AN e MÚL ár [šá ALLA šá SI/ULÙ ...]
 5' [...] APIN' GE₆ 1 ina ZÁLAG AN e MÚL TUR šá 4 K[ÙŠ ár LUGAL ...]
 6' [...] U]SAN AN ana ŠÚ ina LAL-šú e LUGAL ½' KÙŠ GE₆ 2' [...]

Rev.'

I broken;

II

- 1 [...]
 2 [...] 'x NIM'
 3-4 [...]
 5 [...] muš
 6 [...] 'x'
 7 [...] N]U PAP'
 8 [...] muš
 9 [...] 'muš'
 10

III

- 1 IZI 1 17 KUR₄ muš 'x x'
 2 12 15 'ŠÚ muš'
 3 12^{sic} 1 M[E] 'a-kam' muš
 4 13 1 'na muš'
 5 14 9 'GE₆ muš'
 6 27 2'5' [...]
 7 KIN 30 12+[...]
 8 [ina] 'GUB' x' [...]
 9 13 6+[x ME ...]
 10 13 7+[x ŠÚ ...]
 11 '14' [x GE₆ ...]

- 6' [...] it became stationary [...] low to the south. Month VII, around the 8th, Saturn's acronychal rising. [...]
 7' [...] until' the 1st', when Saturn became stationary [to the west], ... [...]
 8' [...] 3 cubits [below] η Piscium. Month XII, around the 26th, [...]
 9' [...] ... [...]

No. 111

'Obv.

- 1' [...] ... [...]
 2' [...] ... Night of the 10+[xth, ...]
 3' [...] Night of the 3rd, last part of the night, Mars was [...] below [α/β] Geminorum [...]
 4' [...] 4 fingers'. Night of the 8th, last part of the night, Mars was [...] above γ/δ [Cancrī ...]
 5' [...] Month VIII', night of the 1st, last part of the night, Mars was [...] above ρ Leo[nis ...]
 6' [...] first part of the night, Mars, while moving back to the west, was ½ cubit above α Leonis. Night of the 2nd', [...]

Rev.'

II

- 1 (broken)
 2 [...] ... high'
 3-4 (broken)
 5 [...] measured.
 6 [...] ...
 7 [...] I did not watch.
 8 [...] measured.
 9 [...] measured'.

III

- 1 Month V, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17°; it was bright, measured, ...
 2 The 12th, moonset to sunrise: 15°, measured.
 3 The 13th (text 12), moonrise to sunset: 1°, measured (despite) mist.
 4 The 13th, sunrise to moonset: 1°, measured.
 5 The 14th, sunset to moonrise: 9°, measured.
 6 The 27th, [moonrise to sunrise:] 25° [...]
 7 Month VI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 12+[x° ...]
 8 [it could be seen while (the sun)] stood there ...
 9 The 13th, [moonrise to sunset:] 6+[x° ...]
 10 The 13th, [moonset to sunrise:] 7+[x° ...]
 11 The 14th, [sunset to moonrise: ...]

No. 112

BM 33608 (= Rm 4,164)

Photo: Pl. 67

Rev.:

- 1 [... G]E₆ 6 USAN GU₄-UD *e is* le₁₀ 4 K[ÛŠ]
 2 [... *e is* le₁₀ 3 KÛŠ GE₆ 15 *ina* ZÁLAG 'x' [...]
 3 [... x]+13 GU₄-UD *ina* ŠÚ *ina* PA I[GI?]
 4 [... 'x' 1 KÛŠ [...]

No. 113

BM 33756 (= Rm 4, 314)

Photo: Pl. 67

Flake

I'

- 1' [... 'x'
 2' [... m]uš
 3' [... D]IR NU PAP
 4' [... 'x' muš

II'

- 1' 13 20+[x] 'NINDA ME'
 2' 13 3 na 'a²-kam' [...]
 3' 14 11 GE₆ a-[kam]
 4' 27 18,50 KUR 'x' [...]
 5' KIN 30 13 na-su 'x x'
 6' 13 3²,40² ME [...]
 7' 13 4,20 ŠÚ [...]
 8' [14 x] 'x' 'GE₆' [...]

No. 114

BM 34097 (= Sp 196)

Copy: LBAT 1306

Flake

- 1' [... 'x' [...]
 2' [... *ina* ŠÚ *ina* A 'x' [(x)]
 3' [...]+17 GU₄-UD *ina* N[IM]

No. 112

Rev.:

- 1 [...] night of the 6th, first part of the night, Mercury was 4 cubits above α Tauri [...]
 2 [...] 3 cubits above α Tauri. Night of the 15th, last part of the night, ... [...]
 3 [... x]+13th, Mercury's first² appearance in the west in Sagittarius [...]
 4 [...] 1 cubit [...]

No. 113

Flake

I'

- 1' [...]
 2' [...] measured.
 3' [...] clouds, I did not watch.
 4' [...], measured.

II'

- 1' The 13th, moonrise to sunset: 20+[x]'.
 2' The 13th, sunrise to moonset: 3°; [measured (despite)] mist.
 3' The 14th, sunset to moonrise: 11°; [measured (despite)] mist.
 4' The 27th, moonrise to sunrise: 18° 50'; [...]
 5' Month VI, (the 1st of which was identical with) the 30th (of the preceding month),
 sunset to moonset: 13°; [...]
 6' The 13th, moonrise to sunset: 3°² 40'² [...]
 7' The 13th, moonset to sunrise: 4° 20' [...]
 8' [The 14th,] sunset to moonrise: x° [...]

No. 114

Flake

- 1' [...] [...]
 2' [...] in the west in Leo [...]
 3' [... x]+17th, Mercury's [...] in the east

- 4' [...] 8 GU₄-UD *ina* NIM
 5' [...] *ina* NI]M' *ina* GU ŠÚ ŠE 22
 6' [...] 'x' GE₆ 11 USAN GU₄-UD
 7' [...] (blank)
-
- 8' [...] DU₆' 12 GENNA *ana* ME 'E-a x x'
 9' [...] 17 GENNA *ina* MÁŠ 'x' KÙŠ' 'x x'
 10' [...] RÍN' 2/3 KÙŠ 'x x' GE₆' x 'x x'
 11' [...] 'x x x x x x' [...]
 12' [...] 'x'
 13' [...] 'x x x x' [...]
 14' [...] 'x x' [...]
 15' [...] 'x x x' [...]
 16' [...] 'x e x x' [...]
 17' [...] 'x šá x x' [...]
 18' [...] 'še-pit MÁŠ-MÁŠ' [...]
 19' [...] 'x' [...]

No. 115

BM 34132 (= Sp 234)

Copy: LBAT 1307

'Rev.'?

I

- 1' [...] ŠÚ *u na*
 2' [...] ME *u* GE₆
 3' [...] x]+20 ŠÚ *u na*
 4' [...] ME *u* GE₆
 5' [...] ŠÚ *u na*
 6' [...] ME *u* GE₆
 7' [...] 'x' ŠÚ *u na*
 8' [...] ME *u* GE₆
 9' [...] ŠÚ *u na*
 10' [...] ME] 'u GE₆'

II

- 1' 15 4, 'x' [ME]
 2' 15 4,40 *na m[uš]*
 3' 16 9,40 GE₆ [...]
 4' 27 17,10 [...]
 5' ŠU 1 20 KUR₄ *ina* GUB IGI [...]
 6' 14 7,30 ME *muš*
 7' 14 2,40 ŠÚ [...]
 8' 15 6 GE₆
 9' [15 x] *na muš*

- 4' [...] the 8th, Mercury's [...] in the east
 5' [...] Mercury's] last appearance [in the east?] in Aquarius. Month XII, the 22nd,
 6' [...] Night of the 11th, first part of the night, Mercury was
 7' [...] (blank)
-
- 8' [...] Month VII', the 12th, Saturn's acronychal rising
 9' [...] 17th, [when?] Saturn [became stationary? to the west?] in Capricorn x cubits?
 10' [...] Libra? 2/3 cubit Night?
 11'-17' [...] [...]
 18' [...] η/μ] Geminorum [...]
 19' [...] [...]

No. 115

'Rev.'?

I

- 1' [...] 'moonset to sunrise' plus 'sunrise to moonset': [...]
 2' [...] 'moonrise to sunset' plus 'sunset to moonrise': [...]
 3' [...] 'moonset to sunrise' plus 'sunrise to moonset': [x]+20' [...]
 4' [...] 'moonrise to sunset' plus 'sunset to moonrise': [...]
 5' [...] 'moonset to sunrise' plus 'sunrise to moonset': [...]
 6' [...] 'moonrise to sunset' plus 'sunset to moonrise': [...]
 7' [...] 'moonset to sunrise' plus 'sunrise to moonset': [...]
 8' [...] 'moonrise to sunset' plus 'sunset to moonrise': [...]
 9' [...] 'moonset to sunrise' plus 'sunrise to moonset': [...]
 10' [...] 'moonrise to sunset' plus 'sunset to moonrise': [...]

II

- 1' The 15th, [moonrise to sunset:] 4° [...]
 2' The 15th, sunrise to moonset: 4° 40'; measured.
 3' The 16th, sunset to moonrise: 9° 40' [...]
 4' The 27th, [moonrise to sunrise:] 17° 10' [...]
 5' Month IV, the 1st (of which followed the 30th of the preceding month, sunset to moonset: 20°; it was bright, it could be seen while (the sun) stood there [...])
 6' The 14th, moonrise to sunset: 7° 30'; measured.
 7' The 14th, moonset to sunrise: 2° 40' [...]
 8' The 15th, sunset to moonrise: 6°.
 9' [The 15th,] moonset to sunrise: [...] measured.

No. 116

BM 34207 (= Sp 313)

Copy: LBA 1309

Obv.:

- 1 [...] 'x x x x' [...]
- 2 [...] (blank)
- 3 [...] 'SIG MÚL e šá SAG GÍR-TAB 6' U 'x' [...]
- 4 [...] (blank)
- 5 [...] 'x' GE₆ 'x' [...] šur GIGIR šá [...]
- 6 [...] MÚL áš šá [...] 'GE₆ 15 x x' [...]
- 7 [...] 2 KÙŠ 'x x x' [x x x] 'x x x x' [...]
- 8 [...] 2/3 KÙŠ *dele-bat* 2 'x x x x' [...]
- 9 [...] KÙŠ 'x' [...] *dele-bat* SIG GÍR áš šá A 4 [...]
- 10 [...] 'x' [...] 'x' U ana NIM DIB KIN 1 e² [...]
- 11 [...] 'x x x' *dele-bat* e S[A₄?] [...]
- 12 [...] *dele-bat* e MÚL 'x' [...]

No. 117

BM 34238 (= Sp 344)

Copy: LBA 1310

Flake (of rev.)

I broken;

II

- 1 [...] *mu*š
- 2 [...]
- 3 [...] 'x'
- 4 [...] *n*a²
- 5 [...] 'x'

III

- 1 DU₆ 1 9² 'na²' [...]
- 2 14 ŠÚ u na NU TUK DIR NU [PAP]
- 3 15 5 ME DIR *muš*
- 4 15 14 na
- 5 16 3,30 GE₆ *muš*
- 6 27 12 KUR
- 7 'APIN' 1 13 na

IV

- 1' 11 [...]
- 2' [...]
- 3' 15 2+[x ...]
- 4' 16 7+[x ...]
- 5' 27 10+[x ...]

No. 116

Obv.:

- 1 [...] ... [...]
- 2 [...] (blank)
- 3 [...] 6 fingers below β Scorpii ... [...]
- 4 [...] (blank)
- 5 [...] ... night ... [...] β/ζ Tauri [...]
- 6 [...] ... [...] Night of the 15th, ... [...]
- 7 [...] 2 cubits ... [...] ... [...]
- 8 [...] 2/3 cubit, Venus being 2 ... [...]
- 9 [...] cubit ... [...] Venus was 4 [fingers?] below β Virginis [...]
- 10 [...] ... [...] having passed x fingers to the east. Month VI, the 1st ... [...]
- 11 [...] ..., Venus was [...] above α² [Virginis ...]
- 12 [...] Venus was [...] above ... [...]

No. 117

Flake (of rev.)

I broken;

II

- 1 [...] *measu*red.
- 2 [...]
- 3-5 [...] ...

III

- 1 Month VII, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 9° [...]
- 2 The 14th, there was no 'moonset to sunrise' and 'sunrise to moonset'; clouds, I did not [watch.]
- 3 The 15th, moonrise to sunset: 5°; measured (despite) clouds.
- 4 The 15th, sunrise to moonset: 14°.
- 5 The 16th, sunset to moonrise: 3° 30'; measured.
- 6 The 27th, moonrise to sunrise: 12°.
- 7 Month VIII, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 13°.

IV

- 1' The 11+[xth, ...]
- 2' [...]
- 3' The 15th, [...] 2+[x° ...]
- 4' The 16th, [...] 7+[x° ...]
- 5' The 27th, [moonrise to sunrise:] 10+[x° ...]

No. 118

BM 34269 (= Sp 377)

Copy: LBAT 1311

Flake

- 1' [...] 'x x' [...]
 2' [...] (blank)
-
- 3' [...] MÚ]L-BABBAR 1 KÙŠ [...]
 4' [...] UŠ]-a ina GU U[Š [...]
 5' [...] IGI 14 'MÚL'-[BABBAR [...]
-
- 6' [...] 1' KÙŠ ina IGI MÚL [...]
 7' [...] UŠ-a ina TIL zib^{me} UŠ [...]

No. 119

BM 34290 (= Sp 400)

Copy: LBAT 1312

'Obv.

- 1' [...] 'x x'
 2' [...] A 3½ KÙŠ

Rev.

- 1 [...] AP]IN GE₆ 20 ina ZÁLAG AN
 2 [...] ŠÚ' ina LAL-šú
 3 [...] (blank)
-
- 4 [...] 'x x'

No. 120

BM 34301 (= Sp 413)

Copy: LBAT 1313

Flake

I and II broken:

III

- 1' [...] 'x' [...]
 2' 16 8 GE₆ 'x'

No. 118

Flake

- 1' [...] [...]
 2' [...] (blank)
-
- 3' [...] Jupiter being 1 cubit [...]
 4' [when it became stationary to the west,] it became stationary in Aquarius [...]
 5' [...] first appearance [...] The 14th, Jupi[ter]
-
- 6' [...] 1' cubit in front of [...]
 7' [...] when] it became stationary [to the west, it became stationary] in the end of Pisces [...]

No. 119

'Obv.

- 1' [...]
 2' [...] 3½ cubits [...] Leonis.

Rev.

- 1 [...] Mon]th VIII, night of the 20th, last part of the night, Mars was
 2 [...] while moving back to the west'
 3 [...] (blank)
-
- 4 [...]

No. 120

Flake

I and II broken:

III

- 1' [...] [...]
 2' The 16th. sunset to moonrise: 8°:

- 3' 27 16 KUR
 4' KIN 1 13,30 *na-su* KUR₄ *muš ana šamáš* SIG
 5' 13 9 ŠÚ
 6' [1]4 5 *na*
 7' [1]5 20 NINDA' ME NU PAP
 8' [1]6 6,40 GE₆ NU PAP
 9' [...] NU PAP

IV

- 1' 13 4 [ŠÚ ...]
 2' 14 6,30 [ME ...]
 3' 14 8 *na* [...]
 4' 15 11 'x' [GE₆ ...]
 5' 'x' [...]

No. 121

BM 34321 (= Sp 435)

Copy: LBA 1314

Flake

- 1' [AN-KU₁₀] *šamáš šá* DIB 'in'
 2' [x] GE₆ GIN

No. 122

BM 34337 (= Sp 452)

Copy: LBA 1315

Flake

I and II broken;

III

- 1' [...] *ana šamáš* SIG
 2' [...] ŠÚ *m* *uš*
 3' [...] ME *muš*
 4' [...] *na* NU PAP
 5' [...] 'x' GE₆ NU PAP
 6' [...] *muš*
 7' [...] NU PAP

- 3' The 27th, moonrise to sunrise: 16°.
 4' Month VI, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 13° 30'; it was bright, measured; it was low to the sun.
 5' The 13th, moonset to sunrise: 9°.
 6' The 14th, sunrise to moonset: 5°.
 7' The 15th, moonrise to sunset: 20'; I did not watch.
 8' The 16th, sunset to moonrise: 6° 40'; I did not watch.
 9' [...] I did not watch.

IV

- 1' The 13th, [moonset to sunrise:] 4° [...]
 2' The 14th, [moonrise to sunset:] 6° 30' [...]
 3' The 14th, sunrise to moonset: 8° [...]
 4' The 15th, [sunset to moonrise:] 11° [...]
 5' The xth, [...]

No. 121

Flake

- 1' solar [eclipse] which was omitted. At
 2' [...] after sunset.

No. 122

Flake

I and II broken;

III

- 1' [...] low [to the sun.]
 2' [...] moonset to sunrise:; mea]sured.
 3' [...] moonrise to sunset: [...] measured.
 4' [...] sunrise to moonset: [...]; I did not watch.
 5' [...] sunset to moonrise:; I did not watch.
 6' [...] measured.
 7' [...] I did not watch.

IV

- 1' ZÍZ 1 15,10² 'x¹ [...]
 2' KALAG² NU [PAP]
 3' 13 8,10 [ŠÚ ...]
 4' 14 2 n[a ...]
 5' 15 20 [ME ...]
 6' 16 10+[x GE₆ ...]
 7' '27²¹ [...]
 8' Š[E ...]

No. 123

BM 34376 (= Sp 494)

Copy: LBAT 1317

Obv.

- 1 [...] 'x¹ [...] 'x x¹ [...]
 2 [...] MÚ]L-BABBAR *ina* RÍN ŠÚ [x x]+2 MÚL-BABBAR [*ina*] RÍN IGI KUR 10 UŠ
 'na²¹
 3 [...] 'ár¹ MÚL e [šá SA]G GÍR-TAB UŠ
 4 [...] 'x¹ [...] 1½ KÙŠ SIG GE₆ 8 USAN MÚL-BABBAR
 5 [...] 'x x x x x¹

'Rev.

- 1' [...] GE₆ DIR NU PAP
 2' [...] DIR NU PAP

No. 124

BM 34378 (= Sp 496)

Copy: LBAT 1318

Flake

- I
 1' [...] 'x¹
 2' [...] I]ZI¹ 13
 3' [AN-KU₁₀ si]n šá DIB
 4' [...] ME NIM-a
 5' [...] AN-KU₁₀ 'šamáš² ki PAP NU IGI
 6' [...] ME NIM-a
 7' [...] 'x x¹

IV

- 1' Month XI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 15° 10'² ... [...]
 2' dense [clouds²], I did not watch.
 3' The 13th, [moonset to sunrise:] 8° 10' [...]
 4' The 14th, sunrise [to moonset:] 2° [...]
 5' The 15th, [moonrise to sunset:] 20'² [...]
 6' The 16th, [sunset to moonrise:] 10+[x° ...]
 7' The 27th¹, [...]
 8' Month XII, [...]

No. 123

Obv.

- 1 [...] ... [...] ... [...]
 2 [...] Jupiter's last appearance in Libra. Month ..., the [x]+2nd, Jupiter's first appearance [in] Libra; it was bright, rising of Jupiter to sunrise: 10°;
 3 [...] it became stationary [...] behind β Scorp.ii.
 4 [...] ... [...] 1½ cubits. Month III, night of the 8th, first part of the night, Jupiter
 5 [...] ...

'Rev.

- 1' [...] sunset to moonrise: [...]; clouds, I did not watch.
 2' [...] clouds, I did not watch.

No. 124

Flake

- I
 1' [...] ...
 2' [...] Month V, the 13th,
 3' lu[nar eclipse] which was omitted.
 4' [At ...] after sunrise.
 5' [...] solar [eclipse:] when I watched I did not see it.
 6' [At ...] after sunrise.
 7' [...] ...

II

- 1' [...] 'x' GE₆¹ [...]
 2' [1]'6' 4,10 na m[uš]
 3' 28 16,30 muš
 4' SIG 1 17 KUR₄ muš ana šamáš NI[M']
 5' 14 16,50 ME DIR NU PAP
 6' 14 11 ŠÚ muš
 7' 15 2 GE₆ muš
 8' 15 3,50 na DIR NU PAP
 9' 28 12 a-kam NU PAP

No. 125

BM 34397 (= Sp 516)

Copy: LBAT 1319

Flake

I'

- 1' [...] 'x'
 2' [...] 'x'
 3' [...] 'x'
 4' [...] 'x'

II'

- 1' DIR KALAG NU IGI
 2' 13 20 NINDA ŠÚ
 3' 14 7,30 ME NU PAP
 4' 14 11,50 na NU PAP
 5' 15 10,40 GE₆ NU PAP
 6' 26 11 KUR

III'

- 1' 14 [...]
 2' 14 'x' [...]
 3' 15 1 'x' [...]
 4' 26 13 KUR
 5' DIR-ŠE 30 12.30
 6' 13 10,30 ŠÚ NU PAP
 7' 14 1,30 'na NU PAP¹
 8' 15 5 M[E]
 9' 16 11+[xGE₆]
 10' 26' [...]

IV'

- 1' 14 'x' [...]
 2' 15 15.20 [...]
 3' 15 6+[x]

II

- 1' [...] sunset to moonrise: [...]
 2' The 16th, sunrise to moonset: 4° 10'; measured.
 3' The 28th, (moonrise to sunrise:) 16° 30'; measured.
 4' Month III, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17°; it was bright, measured; it was high' to the sun.
 5' The 14th, moonrise to sunset: 16° 50'; clouds, I did not watch.
 6' The 14th, moonset to sunrise: 11°; measured.
 7' The 15th, sunset to moonrise: 2°; measured.
 8' The 15th, sunrise to moonset: 3° 50'; clouds, I did not watch.
 9' The 28th, (moonrise to sunrise:) 12°; mist, I did not watch.

No. 125

Flake

I'

- 1'-4' [...]

II'

- 1' dense clouds, I did not see (the moon).
 2' The 13th, moonset to sunrise: 20'.
 3' The 14th, moonrise to sunset: 7° 30'; I did not watch.
 4' The 14th, sunrise to moonset: 11° 50'; I did not watch.
 5' The 15th, sunset to moonrise: 10° 40'; I did not watch.
 6' The 26th, moonrise to sunrise: 11°.

III'

- 1' The 14th, [moonrise to sunset:]
 2' The 14th, [sunrise to moonset:] [...]
 3' The 15th, [sunset to moonrise:] 1° [...]
 4' The 26th, moonrise to sunrise: 13°.
 5' Month XII₂, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 12° 30'.
 6' The 13th, moonset to sunrise: 10° 30'; I did not watch.
 7' The 14th, sunrise to moonset: 1° 30'; I did not watch.
 8' The 15th, moonrise to sunset: 5° [...]
 9' The 16th, [sunset to moonrise:] 11+[x°]
 10' The 26th², [...]

IV'

- 1' The 14th, [...] [...]
 2' The 15th, [...] 15° 20' [...]
 3' The 15th, [...] 6+[x°]

No. 126

BM 34408 (= Sp 527)

Copy: LBAT 1321

Photo: Pl. 67

Flake

- 1' [...] 'x' [...]
 2' [...] x x [...]
 3' [...] 'x x x' [...]
 4' [...] LUGAL GU₄ GE₆ 20' [...]
 5' [...] AN SIG MÚL ár [...]
 6' [...] AN e MÚL' [...]
 7' [...] 'x' AN S[IG' [...]
 8' [...] AN SIG [...]
 9' [...] 'x' AN e M[ÚL [...]
 10' [...] USAN AN e MAŠ-[MAŠ šá SIPA [...]
 11' [...] 'IGI'-DUH-A^{meš} D[IB [...]

No. 127

BM 34422 (= Sp 542)

Copy: LBAT 1323

I'

- 1' [...] 'x' [...]
 2' [...],30 GE₆ [...]
 3' [...] KUR DIR muš
 4' [...] n]a KUR₄ a-pir muš
 5' [...] DIR muš
 6' [...] D]IR muš
 7' [...] DI]R muš
 8' [...] muš

II'

- 1' [KIN] 30 'x x' [...]
 2' [1]4 7,30 ME a-kam muš
 3' 14 9 ŠÚ muš
 4' 15 30 NINDA GE₆ a-kam muš
 5' 15 3,30 na a-kam muš
 6' 28 10 UŠ KUR a-kam muš
 7' DU₆ 1 15 na KUR₄ [...]
 8' 14 6+[x ME [...]
 9' 14 'x' [ŠÚ [...]
 10' 'x' [...]

No. 126

Flake

- 1' [...] [...]
 2' [...] [...]
 3' [...] [...]
 4' [...] king [...] Month II, night of the 20th² [...]
 5' [...] Mars was [...] below [...]
 6' [...] Mars was [...] above [...]
 7' [...] Mars was [...] be[low² [...]
 8' [...] Mars was [...] below [...]
 9' [...] Mars was [...] above [...]
 10' [...] first part of the night, Mars was [...] above γ Ge[minorum [...]
 11' [...] first appearances, pa[ssings, [...]

No. 127

I'

- 1' [...] [...]
 2' [...] sunset to moonrise: [x°] 30' [...]
 3' [...] moonrise to sunrise: [...] measured (despite) clouds.
 4' [...] sunset to moonset: [...] it was bright, earthshine, measured.
 5' [...] measured (despite) clouds.
 6' [...] measured (despite) clouds.
 7' [...] measured (despite) clouds.
 8' [...] measured.

II'

- 1' [Month VI,] (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]
 2' The 14th, moonrise to sunset: 7° 30'; measured (despite) mist.
 3' The 14th, moonset to sunrise: 9°; measured.
 4' The 15th, sunset to moonrise: 30'; measured (despite) mist.
 5' The 15th, sunrise to moonset: 3° 30'; measured (despite) mist.
 6' The 28th, moonrise to sunrise: 10°; measured (despite) mist.
 7' Month VII, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 15°; it was bright, [...]
 8' The 14th, [moonrise to sunset:] 6+[x° [...]
 9' The 14th, [moonset to sunrise:] [...]
 10' [...]

No. 128

BM 34430 (= Sp 553)

Copy: LBAT 1324

Photo: Pl. 67

'Obv.'

- 1' [...] 24 'dele-bat' [...]
 2' [...] 'e' MÚL TUR [...]
 3' [...] A]PIN 25 dele-bat ina N[IM² ...]
 4' [...] nu-nu 2½ KÙŠ GE₆ 20+[x ...]
 5' [...] S]IG MÚL ár šá SAG HUN 4 [KÙŠ ...]
 6' [...] 'x' e is le₁₀ 3 K[ÙŠ ...]
 7' [...] GU₄-UD ina ŠÚ 1 KÙŠ 8 SI ina² I[GI² ...]
 8' [...] šur GIG]IR šá SI 1½ KÙŠ G[E₆² ...]
 9' [...] 'KÙŠ' GE₆ 24 USAN GU₄-UD e [...]

'Rev.'

I and II broken;

III

- 1' [...] 'ŠÚ x'
 2' [...],40 ME muš
 3' [...] x]+1 na muš
 4' [...] 'x',30 GE₆
 5' [2]'8' 22 muš
 6' 'x' 1 15 KUR₄ a-pir muš
 7' [x] 'x' ana šamáš SIG
 8' [x] 12 ŠÚ
 9' [x] 2,30 na muš
 10' [x x]+1,30 ME m[uš]
 11' [x x]+4,30 [GE₆ ...]

IV

- 1' '13' [...]
 2' 13 [...]
 3' 14 3' [GE₆ ...]
 4' 27 9 [...]
 5' ZÍZ 30 20+[x ...]
 6' 13 3+[x ŠÚ ...]
 7' 14 'x' [ME ...]
 8' 14 [x na ...]

Comments

Obv. 6': There is a little bit more space after this line, so it probably still refers to Venus.

No. 128

'Obv.'

- 1' [...] the 24th, Venus [...]
 2' [...] above ... [...]
 3' [...] Month] VIII, the 25th, Venus' [...] in the ea[st² ...]
 4' [...] 2½ cubits [below η] Piscium. Night of the 20+[xth, ...]
 5' [...] 4 [cubits] below α Arietis. [...]
 6' [...] 3 cubits above α Tauri. [...]
 7' [...] Mercury's [...] in the west, 1 cubit 8 fingers in f[ront² ...]
 8' [...] 1½ cubits [below] β Tauri. Ni[ght² ...]
 9' [...] cubits. Night of the 24th, first part of the night, Mercury was [...] above [...]

'Rev.'

I and II broken:

III

- 1' [...] moonset to sunrise: [...] ...
 2' [...] moonrise to sunset: [x°] 40', measured.
 3' [...] sunrise to moonset: [x]+1°; measured.
 4' [...] sunset to moonrise: x° 30'.
 5' The 28th, (moonrise to sunrise:) 22°; measured.
 6' ..., the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 15°; it was bright, earthshine, measured;
 7' [...] it was low to the sun.
 8' [...] moonset to sunrise: 12°.
 9' [...] sunrise to moonset: 2° 30'; measured.
 10' [...] moonrise to sunset: [x]+1° 30'; mea[sured].
 11' [...] sunset to moonrise: x]+4° 30' [...]

IV

- 1' The 13th, [...]
 2' The 13th, [...]
 3' The 14th, [sunset to moonrise:] 3°? [...]
 4' The 27th, (moonrise to sunrise:) 9° [...]
 5' Month XI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 20+[x° ...]
 6' The 13th, [moonset to sunrise:] 3+[x° ...]
 7' The 14th, [moonrise to sunset:] ... [...]
 8' The 14th, [sunrise to moonset: ...]

No. 129

BM 34506 (= Sp 630)

Copy: LBAT 1326

Photo: Pl. 68

Flake

- 1' [...] 'x' [x x x] 'x' [...]
 2' [...] GE₆ 13 USAN *dele-bat* 'x' [...]
 3' [...] GE₆ 27 USAN *dele-bat* 'e' [...]
 4' [...] GE₆ 13 USAN 'dele-bat' [...]
 5' [...] 'KÜŠ' GAN GE₆ 6 USA[N [...]
 6' [...] MÚL] *ár šá* SUḪUR MÁŠ 1 [...]
 7' [...] 'x AB² in² 5² [...]

No. 130

BM 34631 (= Sp II 114)

Copy: LBAT 1305

'Obv.'

- 1' [...] x]+12 GENNA 'x' [...]
 2' [...] *ina* SA]G² GÍR-TAB ŠÚ APIN 10 GENNA *ina* GÍR-TAB 2/3 [KÜŠ IGI]
 3' [...] e] SI₄ 3 KÜŠ ŠE *in* EN 8 GENNA *ana* NIM *ki* U[Š-ú]
 4' [...] *ina* SA]G² MAŠ-MAŠ 2½ KÜŠ *ár šur* GIGIR *šá* SI 2 KÜŠ *ana* ULÙ SIG I[GI]
 5' [...] *k*]i UŠ-ú 3 KÜŠ *ár* DELE *šá* IGI ABSIN UŠ ZÍZ *in* 18 AN *ana* ME [E-a]
 6' [...] GÍR] *ár šá* A UŠ NU PAP
 7' [...] MÚL IGI *šá še-pít* MAŠ-MAŠ 2 SI *šá šu-ut* KA GE₆ 24 *ina* ZÁLAG AN 'x' [...]
 8' [...] 'š_u-ut KA' SIG GE₆ 16 *ina* ZÁLAG AN SIG MAŠ-MAŠ IGI 4 KÜŠ [...]

Rev.'

I broken;

II

- 1' [...] *mu*]š
 2' [...] *mu*š
 3' [...] D]IR *mu*š
 4' [...] D]IR *mu*š
 5' [...] DI]R *mu*š
 6' [...] D]IR NU PAP
 7' [...] DI]R *mu*š
 8' [...] *mu*]š

No. 129

Flake

- 1' [...] [....] [....]
 2' [...] Night of the 13th, first part of the night, Venus was [....]
 3' [...] Night of the 27th, first part of the night, Venus was [....] above [....]
 4' [...] Night of the 13th, first part of the night, Venus was [....]
 5' [...] cubits. Month IX, night of the 6th, first part of the night, [....]
 6' [...] 1 [....] δ Capricorni [....]
 7' [...] Month X², around² the 5th², [....]

No. 130

'Obv.'

- 1' [...] the x]+12th, Saturn's [....]
 2' [...] last appearance [in the beginn]ing² of Scorpius. Month VIII, the 10th, Saturn's [first appearance] in Scorpius, 2/3 [cubit]
 3' [...] 3 cubits [above] α Scorp. Month XII, around until the 8th, when Saturn became stationary to the east, [....]
 4' [...] first appea]rance [in the beginn]ing² of Gemini, 2½ cubits behind β Tauri, 2 cubits low to the south [....]
 5' [...] when [Mars] became stationary [to the east,] it became stationary 3 cubits behind γ Virginis. Month XI, around the 18th, Mars' acronychal rising [....]
 6' [...] it became stationary [....] β Virginis; I did not watch.
 7' [...] 2 fingers [....] η Geminorum; according to oral information. Night of the 24th, last part of the night, Mars [....]
 8' [...] oral information. Month III, night of the 16th, last part of the night, Mars was 4 cubits below α Geminorum.

Rev.'

I broken;

II

- 1' [...] mea]sured.
 2' [...] measured.
 3' [...] measured (despite) clouds.
 4' [...] measured (despite) clouds.
 5' [...] measured (despite) clouds.
 6' [...] cl]ouds, I did not watch.
 7' [...] measured (despite) clouds.
 8' [...] measu]red.

III

- 1 [IZ]I 1 17 KUR₄ x [....]
 2 12 3 [....]
 3 [13] [x]+6 ME m[uš]
 4 13 'x' na muš
 5 14 3 GE₆ NU PA[P]
 6 27 8,30 KUR a-ka[m x]
 7 KIN 30 12+[x] KUR₄ muš ana šamáš 'SIG'
 8 12 11,30 ŠÚ muš
 9 13 1,10 'na' a-kam muš
 10 14 '2' 'ME a'-kam muš
 11 15 7 GE₆
 12 27 16 KUR muš
 13 [DU₆] '30' [x]+10,40 DIR 'x'

IV

- 1' AB [....]
 2' '15'¹ [....]
 3' '15'¹ [....]
 4 10+[x]
 5 10+[x]
 6 10+[x]

Date

Goal year proposed in LBAT p. xxvi: SE 352 = AD 41. This would imply the years SE 293 for the Saturn paragraph, SE 273 for the first Mars paragraph, and SE 305 for the second. While the Saturn data fit approximately, neither Mars paragraph agrees with computation. A somewhat better match is found by goal year SE 146, for which the Saturn (SE 87) and first Mars (SE 67) paragraphs agree with computation. The second Mars paragraph however, which would refer to SE 99, does not agree; Mars was invisible until III 19. It passed α Geminorum on about IV 20, so that line 8' cannot even be made to agree by simply emending the month name.

No. 131

BM 34649 (= Sp II 132)

Copy: LBAT 1365

'Obv.'

- 1' [....] IZI 20+[x]
 2' [....] ŠE DIR
 3' [....] SIG šur GIGIR šá' SI 2 KÙŠ GE₆ 14 USAN dele-bat e šur GIGIR šá U[LÙ x] KÙŠ
 4' [....] dele-bat e MÚL ár šá še-pít MAŠ-MAŠ 1 KÙŠ GE₆ 26
 5' [....] SIG MAŠ-MAŠ IGI 3 KÙŠ GE₆ 10 USAN dele-bat SIG MAŠ-MAŠ ár 2 KÙŠ

III

- 1 [Mon]th V, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 17°; it was bright, [....]
 2 The 12th, [moonset to sunrise:] 3° [....]
 3 [The 13th,] moonrise to sunset: [x]+6°; mea[sured.]
 4 The 13th, sunrise to moonset: x°; measured.
 5 The 14th, sunset to moonrise: 3°; I did not watch.
 6 The 27th, moonrise to sunrise: 8° 30'; mist, [....]
 7 Month VI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 12+[x°]; it was bright, measured; it was low to the sun.
 8 The 12th, moonset to sunrise: 11° 30'; measured.
 9 The 13th, sunrise to moonset: 1° 10'; measured (despite) mist.
 10 The 14th, moonrise to sunset: 2°; measured (despite) mist.
 11 The 15th, sunset to moonrise: 7°.
 12 The 27th, moonrise to sunrise: 16°; measured.
 13 [Month VII,] (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [x]+10° 40'; clouds,

IV

- 1' Month X, [....]
 2' The 15th¹, [....]
 3' The 15th¹, [....]
 4' The 10+[xth,]
 5' The 10+[xth,]
 6' The 10+[xth,]

No. 131

'Obv.'

- 1' [....] Month V, the 20+[xth,]
 2' [....] Month XII was intercalary.
 3' [....] 2 cubits [below] β Tauri. Night of the 14th, first part of the night, Venus was [x] cubits above ζ Tauri.
 4' [....] Venus was 1 cubit above μ Geminorum. Night of the 26th,
 5' [....] 3 cubits [below α] Geminorum. Night of the 10th, first part of the night, Venus was 2 cubits below β Geminorum.

- 6' [... SIG S]AG A 3 KÙŠ GE₆ 11 USAN *dele-bat*
 7' [... US]AN *dele-bat* SIG GIŠ.KUN A 4 [KÙŠ]
 8' [... GE₆ x]+3 USAN *dele-bat* 'x' [x]
 9' [...] 'x x' [...]

'Rev.'

I and II broken;

III

- 1' [...] 'x'

IV

- 1' [...] 'x x' [...]
 2' [...] *i-sa ana šamáš* 'NIM'
 3' [14 x]+11 ME DIR *muš*
 4' [14 x] ŠÚ DIR *muš*
 5' [15] 4 GE₆ DIR *muš*
 6' 15 9 *na* DIR *muš*
 7' 27 15 KUR DIR *muš*
 8' DIR-ŠE 30 14 *na-su* DIR *muš*

Colophon

- 1 [...] 'x x x x'

No. 132

BM 34675 (Sp II 162)

Copy: LBA^T 1328

Flake

- 1' [...] 'AN *ana ŠÚ ki* [...]
 2' [...] 'x' GE₆ 2 USAN A[N ...]
 3' [...] AN SIG MÚL IGI *ša* SAG [HUN nn mm ...]
 4' [... SIG M]ÚL *ár ša* SAG HUN 4 KÙŠ x x [...]
 5' [...] SIG] MÚL-MÚL 1 KÙŠ GE₆ 22 USAN AN *e is* l[e₁₀ nn mm ...]
 6' [...] GE₆ 12 USAN AN SIG *šur* GIGIR *ša* SI 1½ KÙŠ [...]
 7' [...] US]AN AN *e šur* GIGIR *ša* ULÙ 2½ KÙŠ ŠE DIR
 8' [...] 'x x' [...]

- 6' [...] 3 cubits [below] ε Leonis. Night of the 11th, first part of the night, Venus was
 7' [...] first] part of the night, Venus was 4 [cubits] below θ Leonis.
 8' [...] night of the x]+3rd, first part of the night, Venus was [...]
 9' [...] [...]

'Rev.'

I and II broken;

III

- 1' [...]

IV

- 1' [...] [...]
 2' [...] it was a little high to the sun.
 3' [The 14th.] moonrise to sunset: [x]+11°; measured (despite) clouds.
 4' [The 14th.] moonset to sunrise: [x°]; measured (despite) clouds.
 5' [The 15th.] sunset to moonrise: 4°; measured (despite) clouds.
 6' The 15th, sunrise to moonset: 9°; measured (despite) clouds.
 7' The 27th, moonrise to sunrise: 15°; measured (despite) clouds.
 8' Month XII₂, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 14°; measured (despite) clouds.

Colophon

- 1 [...]

No. 132

Flake

- 1' [...] when Mars [became stationary] to the west, [...]
 2' [...] Night of the 2nd, first part of the night, Mars [...]
 3' [...] Mars was [...] below β Arietis [...]
 4' [...] 4 cubits [below] α Arietis [...]
 5' [...] 1 cubit [below] η Tauri. Night of the 22nd, first part of the night, Mars was [...] above α Tauri [...]
 6' [...] Night of the 12th, first part of the night, Mars was 1½ cubits below β Tauri [...]
 7' [...] first] part of the night, Mars was 2½ cubits above ζ Tauri. Month XII was intercalary.
 8' [...] [...]

No. 133

BM 34698 (= Sp II 185)

Copy: LBA 1329

Flake

- 1' [...] ^rdele-bat^r [...] [
 2' [...] šá^r KA^r x [...] [
 3' [...] ina x ŠÚ x x [...] [
 4' [...] ^rx x x^r [...] [
 5' [...] ^rx x x^r [...] [
 6' [...] 17^r GU₄-UD x x [...] [
 7' [...] ^rx GU₄-UD x^r [...] [
 8' [...] ^rx x^r [...] [

No. 134

BM 34889 (= Sp II 398)

Copy: LBA 1364

Photo: Pl. 68

Upper edge

- 1 ^rina a^r-mat ^dEN u ^dGAŠAN-[iá liš-lim]

Obv.

- 1 MU-1-me-29-KAM [...] [
 2 ki UŠ-a 1½ [KÜŠ [...] [
 3 GE₆ 4 x [...] [
 4 MU-1,15-[KAM [...] [

Rev.

- I
 1' ^rx x^r [...] [
 2' ^r28^r 15 K[UR^r
 3' ŠU 1 16 KUR₄ ^rx^r [...] [
 4' a-pir muš ina GUB IGI
 5' ^r15^r 7^r ŠÚ muš
 6' 15 30 NINDA ME muš
 7' 16 9 na muš
 8' 16 10 UŠ GE₆ m[uš]

Comments

Obv. 1 and 4: The two year numbers do not fit together. The first most likely refers to Jupiter, so the goal year would be SE 200 (or 201, if the first year number only introduces a note about an intercalary month (which SE 129 happens to have). The expression GE₆ 4 in line 3 shows that this line contained conjunctions with Normal stars; Greek-letter phenomena

No. 133

Flake

- 1' [...] Venus^r [...] [
 2' [...] [...] [
 3' [...] last appearance in [...] [
 4' [...] [...] [
 5' [...] [...] [
 6' [...] the 17th^r, Mercury [...] [
 7' [...] Mercury [...] [
 8' [...] [...] [

No. 134

Upper edge

- 1 At the command of Bel and Belti[ja may it go well.]

Obv.

- 1 Year 129, [...] [
 2 when [...] became stationary [to the west, it became stationary] 1½ [cubits] [
 3 Night of the 4th, [...] [
 4 Year 75, [...] [

Rev.

- I
 1' [...] [
 2' The 28th, moonrise to sunrise: 15°. [
 3' Month IV, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 16°; it was bright, [...] [
 4' earthshine, measured; it could be seen while (the sun) stood there.
 5' The 15th, moonset to sunrise: 7°^r, measured.
 6' The 15th, moonrise to sunset: 30', measured.
 7' The 16th, sunrise to moonset: 9°, measured.
 8' The 16th, sunset to moonrise: 10°. mea[sured.]

are identified by day number only. It is conceivable that a different year number (expected: 117) was given in the broken part of line 2 to introduce the section on Normal star conjunctions; but this usually begins a new line.

Further, a second stationary point (line 2) occurs only towards the end of SE 129 (or 130). One could assume that the number in line 1 refers to the Arsacid era, so to SE 193 (or 194). In these years, a second station occurs early in the year. The resulting Goal year SE 264 (or 265) is uncomfortably late. Whichever year is chosen, it does not fit a second Jupiter paragraph beginning in line 4, because the difference ought to be 12 years.

The year number in line 4 was copied as 1,15 by Pinches, but might be 1,45 (it is slightly damaged). A year 75 in line 4 cannot begin a Venus paragraph, not even if one assumes that 75 is Arsacid era, i.e. SE 139 (which would imply a goal year of SE 147). Neither would 105 fit, which taken as Arsacid era leads to a goal year of SE 177 only.

It is of course possible that the beginning paragraph is not for Jupiter anyway.

No. 135

BM 34906 (= Sp II 419)

Copy: LBA 1330

Flake

- 1' [...] 'x x' [...]
 2' [x] 8,20 GE₆
 3' [2]7 18 DIR *muš*
 4' [G]AN² 1 22² DIR NU PAP
 5' [1]3 6,30 ME *muš*
 6' [1]3 10 NINDA ŠÚ AN² NU PAP
 7' [14] 6,40 GE₆ DIR NU PAP
 8' [14] 15 *na* 'x'
 9' [x] 15,40 [...]
 10' [AB' x] 17 'x' [...]

No. 136

BM 34956 (= Sp II 477)

Copy: LBA 1332

Photo: Pl. 68

'Obv.'

- 1' [...] 'SIG' MAŠ-MAŠ IGI 5 KÙŠ 27² [...]
 2' [...] *ina* ŠÚ *ina* ABSIN ŠÚ NU PAP 'x x' [...]
 3' [...] KÙŠ *in* 'x x' [...]
 4' [...] 'x x x' [...]

No. 135

Flake

- 1' [...] ... [...]
 2' [The xth, moonrise to sunset: 8° 20'.
 3' [The 2]7th, (moonrise to sunrise:) 18°; measured (despite) clouds.
 4' Month IX², the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 22°²; clouds, I did not watch.
 5' [The 1]3th, moonrise to sunset: 6° 30'; measured.
 6' [The 1]3th, moonset to sunrise: 10'; rain², I did not watch.
 7' [The 14th,] sunset to moonrise: 6° 40'; clouds, I did not watch.
 8' [The 14th,] sunrise to moonset: 15°; ...
 9' [The xth,] (moonrise to sunrise:) 15° 40'; [...]
 10' [Month X², ...] (sunset to moonset:) 17°; ... [...]

No. 136

'Obv.'

- 1' [...] 5 cubits below α Geminorum. The 27th², [...]
 2' [...] last appearance in the west in Virgo; I did not watch ... [...]
 3' [...] cubits. Around ..., [...]
 4' [...] ... [...]

'Rev.'

I

- 1' [... ŠÚ n]a
 2' [... ME] GE₆
 3' [... ŠÚ na]
 4' [... ME] GE₆
 5' [... ŠÚ n]a

II

- 1' [15] 'x x' [ŠÚ]
 2' 16 10,30 GE₆ *muš*
 3' 16 7,30 *na muš*
 4' 27 15,30 DIR *muš*
 5' GU₄ 30 12 SIG *muš ana šamáš* SIG
 6' 15 14 ME DIR NU PAP
 7' 15 '6',10ŠÚ DIR NU PAP

No. 137

BM 34996 (= Sp II 520)

Copy: LBA 1484

Photo: Pl. Pl. 68

'Obv.'

- 1' 'x' [...] 'x x' [...]
 2' 'x x' [...] šá 'SI' [...] [...]
 3' 'GE₆' 9' 'x x x x' 13' 'x' [...]
 4' GE₆ 9 *ina ZÁLAG dele-bat* SIG LUGAL 1 [...]
 5' x 1 'GE₆ x' *dele-bat* SIG 'x' [...]
 6' ½ KÙŠ' 16' SIG RÍN šá S[I' [...]
 7' 13 'x x' AB 1 7 [...]
 8' 'x x' [x x] 'x ŠE' x' [...]

'Rev.'

- 1' (traces)

- 2' 'MU-1-me'-48'-KAM' I [...]
 3' 'ziq-pi AN'-KU₁₀ I' [...]
 4' 'x x x' [...]
 5' 28 'x x á' [...] [...]
 6' DU₆ 13 1.50' [...]
 7' GE₆ 29 4' [...]
 8' ŠE' 29 '1' [...]

'Rev.'

I

- 1' [..., 'moonset to sunrise' (plus) 'sunrise' to moonset': [...]
 2' ['moonrise to sunset' (plus) 'sunset to moonrise': [...]
 3' [..., 'moonset to sunrise' (plus) 'sunrise to moonset': [...]
 4' ['moonrise to sunset' (plus) 'moonrise to sunset': [...]
 5' [..., 'moonset to sunrise' (plus) 'sunrise' to moonset': [...]

II

- 1' [The 15th, moonset to sunrise:] ... [...]
 2' The 16th, sunset to moonrise: 10° 30': measured.
 3' The 16th, sunrise to moonset: 7° 30': measured.
 4' The 27th, (moonrise to sunrise:) 15° 30': measured (despite) clouds.
 5' Month II, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 12°: it was faint, measured: it was low to the sun.
 6' The 15th, moonrise to sunset: 14°: clouds. I did not watch.
 7' The 15th, moonset to sunrise: 6° 10': clouds. I did not watch.

No. 137

'Obv.'

- 1' ... [...] ... [...]
 2' ... [...] northern' [...] [...]
 3' Ni[ght'] of the 9th', [...] ... [...]
 4' Night of the 9th, last part of the night, Venus was 1+[x ...] below α Leonis [...]
 5' ... night of the xth, Venus was [...] below ... [...]
 6' ½ cubit', ... below β Librae [...]
 7' 13' ... Month X, the 1st, 7° [...] [...]
 8' ... [...] ... Month XII ... [...]

'Rev.'

- 1' (traces)

- 2' Year 148', [...] [...]
 3' culminated, eclipse [...] [...]
 4' ... [...] [...]
 5' The 28th, ... behind' [...] [...]
 6' Month VII, the 13th, [...] 1° 50' [...] [...]
 7' Night of the 29th, 4' [...] [...]
 8' Month XII', the 29th, 1 [...] [...]

Comments

Obv. 6': the traces as read do not agree with the usual terminology of observations.

7': AB 1 7 is clear; the only restoration to be expected in a goal year text is *na*, meaning the time interval between the crossings of the horizon by the planet and the sun. This interval is measured shortly before last visibility of the planet, which will occur a few days later.

I could not find a suitable date from this information that would fit the remaining rather uncertain data.

Rev. 2': of the year number, only 8 is probable. A year 128 would fit the months of the eclipses mentioned, but not the Venus data on the obverse.

No. 138

BM 35121 (= Sp II 667)

Copy: LBAT 1333

Flake

I'

- 1' [1]5 'x' [ME]
 2' [1]5 1 'na' x'
 3' [1]6 10,30 GE₆
 4' [2]7⁷ 17 KUR KUR₄ *muš*

II'

- 1' '15' 10+[x]
 2' 27 18 KUR 'x' [...]

Colophon

- 1 [...] ^{meš} u AN-KU ₁₀ ^{meš} [...]
 2 [...] ¹Ar-[šá-ka-a LUGAL]

No. 139

BM 35168 (= Sp II 720)

Copy: LBAT 1336

Photo: Pl. 69

Readings very uncertain.

'Obv.'

- 1' [...] 'x' [...]
 2' [...] x x [...]
 3' [...] 'x' IGI 'x' [...]
 4' [...] 'x' [...]

No. 138

Flake

I'

- 1' [The 1]5th, [moonrise to sunset: [...]]
 2' [The 1]5th, sunrise to moonset: 1°;
 3' [The 1]6th, sunset to moonrise: 10° 30'.
 4' [The 2]7th⁷, moonrise to sunrise: 17°; it was bright, measured.

II'

- 1' The 15th, [...] 10+[x°]
 2' The 27th, moonrise to sunrise: 18° [...]

Colophon

- 1 [...] and eclipses [...]
 2 [...] king] Ar[saces.]

No. 139

'Obv.'

Translation not warranted.

'Rev.'

I

- 1' [...] 'x' 50² ŠÚ² na²
 2' [...] 50² [...]
 3' [...] 9,20 ŠÚ¹ [na]
 4' [...] 4² 10+'x x' [x]
 5' [...] 12² ŠÚ na¹
 6' [...] 'x ME² GE₆¹
 7' [...] ŠÚ² na²

II

- 1' MU-[...]
 2' BAR 'x' [...]
 3' 13 [x] ŠÚ [...]
 4' 14 'x' [ME [...]
 5' 1[4] 'x' [na [...]
 6' '15' 15 G[E₆ [...]
 7' 26 15 [...]
 8' GU₄ 30 '11 x' [...]
 9' 10+[x] 5,30 ŠÚ
 10' [...] 'x' ME

No. 140

BM 35223 (= Sp II 784)

Copy: LBAT 1337

Flake

II

- 1' [...] 'x'
 2' [...] 'x' NU PAP
 3' [...] 'x'

III

- 1' [DU₆] '1' 8,30 a-kam
 2' [KA]LAG ki PAP NU IGI
 3' [1]3 2 ŠÚ
 4' [1]4 1,20 ME muš
 5' 14 13 na muš
 6' 15 5 GE₆
 7' 27 19 KUR muš
 8' APIN 1 10 UŠ' KUR₄ muš
 9' [x]+2 7 ŠÚ
 10' [x]+1 8 ME muš
 11' [x] 8 na m[uš]
 12' [x] x 'x' [GE₆ [...]

'Rev.'

I

Translation not warranted.

II

- 1' Year [...]
 2' Month I, ... [...]
 3' The 13th, [moonset to sunrise: ...]
 4' The 14th, [moonrise to sunset:] ... [...]
 5' The 1[4]th, sunrise to moonset:] ... [...]
 6' The 15th, sunset [to moonrise:] 15° [...]
 7' The 26th, (moonrise to sunrise:) 15° [...]
 8' Month II, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 11° ... [...]
 9' The 10+[x]th, moonset to sunrise: 5° 30'.
 10' [The xth,] moonrise to sunset: ...

No. 140

Flake

II

- 1' [...] ...
 2' [...] ..., I did not watch.
 3' [...] ...

III

- 1' [Month VII,] the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 8° 30'; dense¹ mist.
 2' when I watched I did not see it.
 3' [The 1]3th, moonset to sunrise: 2°.
 4' [The 1]4th, moonrise to sunset: 1° 20': measured.
 5' The 14th, sunrise to moonset: 13°: measured.
 6' The 15th, sunset to moonrise: 5°.
 7' The 27th, moonrise to sunrise: 19°: measured.
 8' Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 10°; it was bright, measured.
 9' [The xth,] moonset to sunrise: 7°.
 10' [The xth,] moonrise to sunset: 8°: measured.
 11' [The xth,] sunrise to moonset: 8°: measured.
 12' [The xth,] sunset to moonrise:] ... [...]

IV

- 1' Z[ÍZ]
 2' 1'3' [....]
 3' 14 [....]
 4' 14 [....]
 5' 15 9' [....]
 6' 27 10+[x KUR]
 7' ŠE [....]
 8' 11+[x]
 9' 10+[x]

No. 141

BM 35278 (= Sp II 847)

Copy: LBAT 1338

Flake

I'

- 1' [....] 'x'
 2' [.... ŠÚ] DIR NU PAP
 3' [....] ME DIR NU PAP
 4' [.... n]a NU PAP
 5' [....] GE₆ NU PAP
 6' [....] +10 a-kam
 7' [....] 'NU IGI'

II'

- 1' 'DU₆' [....]
 2' 12 12 [ŠÚ]
 3' 13 30 NINDA [ME]
 4' 13 1+[x na]
 5' 14 7 [GE₆]
 6' 27 19 [....]
 7' 'APIN' [....]

IV

- 1' Month {XI,}
 2' The 13th. [....]
 3' The 14th. [....]
 4' The 14th. [....]
 5' The 15th. [sunset to moonrise:] 9°' [....]
 6' The 27th. [moonrise to sunrise:] 10+[x°]
 7' Month XII. [....]
 8' The 11+[xth,]
 9' The 10+[xth,]

No. 141

Flake

I'

- 1' [....]
 2' [...., moonset to sunrise:;] clouds, I did not watch.
 3' [...., moonrise to sunset: [....;] clouds, I did not watch.
 4' [...., sunrise to moonset: [....;] I did not watch.
 5' [...., sunset to moonrise: [....;] I did not watch.
 6' [...., moonrise to sunrise: x]+10°; mist,
 7' [....] I did not see (it).

II'

- 1' Month VII, [....]
 2' The 12th, [moonset to sunrise:] 12°; [....]
 3' The 13th, [moonrise to sunset:] 30'; [....]
 4' The 13th, [sunrise to moonset:] 1+[x°;]
 5' The 14th, [sunset to moonrise:] 7°; [....]
 6' The 27th, [moonrise to sunrise:] 19° [....]
 7' Month VIII, [....]

No. 142

BM 35295 (= Sp II 865)

Copy: LBA 1341

Flake

I'

- 1' [...] 'x' [...]
 2' 15 12 GE₆[?] [...]
 3' 27 14,50 *muš*
 4' 'GAN' 30 11,20 *a* NU IGI
 5' [1]3[?] 12,40 ŠÚ NU PAP
 6' [x] [x]+3 ME *muš*
 7' [x x]+10 *na* DIR NU PAP
 8' [x x] GE₆ DIR NU PAP
 9' [x x] DIR NU PAP

II'

- 1' 10+[x]
 2' x [...]
 3' 14 [...]
 4' 15 [...]
 5' 15 [...]
 6' 16 [...]
 7' 23+[x]

No. 143

BM 35902 (= Sp III 437)

Copy: LBA 1348

Flake

I

- 1' [...] 'x' [...]
 2' [...] M]ÚL-BA[BBAR]
 3' [...] U]DU.TIL^{meš} NU [GUB^{meš}]
 4' [...] 18 GE₆ GIN
 5' [...] AN-KU₁₀ *s*]in 5 ÁB BAR DIB in 10 U[Š]
 6' [...] 'x'
 7' 'GE₆[?] 29 AN-KU₁₀ *šamáš šá* DIB
 8' in 1,40 GE₆ GIN
 9' [...] 'x'
 10' [...] 'x x'
 11' [...] in' 1 GE₆ *ana* ZALÁG

No. 142

Flake

I'

- 1' [...] [...]
 2' The 15th, sunset to moonrise: 12° [...]
 3' The 27th, (moonrise to sunrise:) 14° 50', measured.
 4' Month IX, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 11° 20'; mist, I did not see (the moon).
 5' [The 1]3th', moonset to sunrise: 12° 40'; I did not watch.
 6' [The xth,] moonrise to sunset: [x]+3°, measured.
 7' [The xth,] sunrise to moonset: [x]+10'; clouds, I did not watch.
 8' [The xth,] sunset to moonrise: [...]; clouds, I did not watch.
 9' [The xth,] (moonrise to sunrise:) [...]; clouds, I did not watch.

II'

- 1' 10+[x]
 2' [...]
 3' The 14th, [...]
 4' The 15th, [...]
 5' The 15th, [...]
 6' The 16th, [...]
 7' The 23+[xth,]

No. 143

Flake

I

- 1' [...] [...]
 2' [...] Jup[iter[?]]
 3' [...] planets did not [stand there]
 4' [...] 18° after sunset.
 5' [...] lunar [eclipse] (after) 5 months, BAR, omitted. At 10°
 6' [...]
 7' Night of the 29th, solar eclipse which was omitted.
 8' At 1,40° after sunset.
 9' [...]
 10' [...]
 11' [...] measured[?]. 1° before sunrise[?].

II

- 1' 10+[x....]
 2' '15' [....]
 3' 28 [....]
 4' G[U₄]

No. 144

BM 35917 (= Sp III 453)

Copy: LBA 1355

Flake

- I'
 1' [....] 'x'
 2' [.... S]IG' *ana šamáš* NIM
 3' [....] *muš*
 4' [....] *muš*
 5' [....] 'muš'

II'

- 1' [....] 'x x' [....]
 2' [12] 9 ŠÚ DIR *muš*
 3' 13 3 *na a-kam muš*
 4' 14 3 ME *a-kam* 'muš'
 5' 15 6 GE₆ [....]
 6' 27 12 KUR *a-k[am x]*
 7' [x] 'x' 11 [....]

No. 145

BM 35985 (= Sp III 526)

Copy: LBA 1350

Flake

- 1' [....] 'x' in [....]
 2' [....] UD-DA ŠÚ-šú DIB [....]
 3' [.... x]+6 *ina* ZALÁG GU₄-UD SIG [....]
 4' [.... x]+4 *ina* ZALÁG GU₄-UD *e* [....]
 5' [.... *na-s*]u in 25 IGI ZÍZ in [....]
 6' [....] 'x' DIR-ŠE in 8 GU₄-UD [....]
 7' [....] GU₄ U₄ 'x' GENNA *ana* ŠÚ *ki x* [....]
 8' [....] x GENNA' *i[n'*]
 9' [....] 'x' IGI KUR [....]

II

- 1' The 10+[xth,]
 2' The 15th, [....]
 3' The 28th, [....]
 4' Month II, [....]

No. 144

Flake

I'

- 1' [....]
 2' [....] faint'; it was high to the sun.
 3' [....] measured.
 4' [....] measured.
 5' [....] measured.

II'

- 1' [....] [....]
 2' [The 12th,] moonset to sunrise: 9°; measured (despite) clouds.
 3' The 13th, sunrise to moonset: 3°; measured (despite) mist.
 4' The 14th, moonrise to sunset: 3°; measured (despite) mist.
 5' The 15th, sunset to moonrise: 6°; [....]
 6' The 27th, moonrise to sunrise: 12°, [....] mist.
 7' [....] 11 [....]

No. 145

Flake

- 1' [....] on [....]
 2' [.... Mercury's] last appearance [....], omitted [....]
 3' [.... The x]+6th, last part of the night, Mercury was [....] below [....]
 4' [.... The x]+4th, last part of the night, Mercury was [....] above [....]
 5' [....] of Mercury to [....]; (ideal) first appearance on the 25th. Month XI, around the [....]
 6' [....] Month XII₂, around the 8th, Mercury's [....]
 7' [....] Month II, day, when Saturn [became stationary] to the west, [....]
 8' [....] Saturn [....]
 9' [.... Saturn's] first appearance [in]; it was bright, [....]

No. 146

BM 35990 (= Sp III 531)

Copy: LBA 1351

Flake

- 1' [...] 'x' [x x x] 'x'
 2' [...] GU₄ GE₆ 5 *ina* ZALÁG [*dele-b*]at' 'x'
 3' [...] SIG MÚL-MÚL 2+[x KÙŠ]
 4' [...] *dele-bat e šur* GIGIR [šá ULÙ] 4 SI
 5' [...] x]+1 SI ^{itu}ŠU GE₆ [x] *dele-bat*
 6' [...] *dele-bat* SIG MAŠ]-MAŠ *ár* 3½ KÙŠ G[E₆ x x x] 'x'
 7' [...] *dele-bat e* LUGAL 1 [x *dele-bat* x] 'x' *ana* ŠÚ LAL
 8' [...] A' šá 'x' [x x x] 'x'

No. 147

BM 36012 (= Sp III 556)

Copy: LBA 1352

Flake

- 1' [...] 'x x x' [...]
 2' [...] 'x x 4' SI^{ti} GE₆ 6 [...]
 3' [...] GU₄-UD *e* MAŠ-MAŠ] šá SIPA 4' KÙŠ² 10' GU₄-UD [...]
 4' [...] 'GU₄-UD' SIG MAŠ-MAŠ IGI 2' [KÙŠ [...]
 5' [...] GU₄-UD SIG MAŠ-MAŠ] *ár* 1 2/3 KÙŠ 'x x' [...]
 6' [...] MÚL] IGI šá ALLA šá ULÙ [...]

 7' [...] 'x' GENNA *e* MÚL TUR šá 'ár^{ti} [...]
 8' [...] 'x' *e* MÚL *ár* šá ALLA šá [...]
 9' [...] 'x GE₆' x x' [...]

No. 148

BM 36023 (= Sp III 567)

Copy: LBA 1353

Flake

- 1' [...] 'x' [...]
 2' [...] 1 S[I [...] 'x x' [x]
 3' [...] 'SI' *dele-bat* 2 SI *ana* NIM DIB GE₆ 5
 4' [...] 'x' *dele-bat e* GÍR *ár* šá A 2 SI *dele-bat* 2 SI *ana* N[IM DIB]
 5' - 6' (blank)

 7' [...] GU₄-UD *ina* ŠÚ *ina* MAŠ-MAŠ IGI KUR NIM-[a]
 8' [...] 'x x x'

No. 146

Flake

- 1' [...] [...]
 2' [...] Month II, night of the 5th, last part of the night, [Venu]s was
 3' [...] 2+[x cubits] below η Tauri.
 4' [...] Venus was 4 fingers above [ζ] Tauri.
 5' [...] x]+1 fingers. Month IV, night [of the xth,] Venus was
 6' [...] Venus was] 3½ cubits [below] β Geminorum. Ni[ght of the xth, ...]
 7' [...] Venus was 1 [mm] above α Leonis, [Venus being] back to the west.
 8' [...] [...]

No. 147

Flake

- 1' [...] [...]
 2' [...] 4' fingers Night of the 6th, [...]
 3' [...] Mercury was] 4' cubits [above] γ Geminorum. The 10th², Mercury's [...]
 4' [...] Mercury was 2' [cubits] below α Geminorum. [...]
 5' [...] Mercury was] 1 2/3 cubits [below β Gemi]norum [...]
 6' [...] θ Cancri [...]

 7' [...], Saturn was above the small star which is behind [...]
 8' [...] above γ/δ Cancri [...]
 9' [...] night² [...]

No. 148

Flake

- 1' [...] [...]
 2' [...] 1 fing[er] [...]
 3' [...] fingers, Venus having passed 2 fingers to the east. Night of the 5th,
 4' [...], Venus was 2 fingers above β Virginis, Venus [having passed] 2 fingers to the east.
 5'-6' (blank)

 7' [...] Mer]cury's first appearance in the west in Gemini; it was bright (and) high,
 8' [...]

No. 149

BM 37005 (= 80-6-17, 749)

Photo: Pl. 69

Flake

- 1' (traces)
 2' [... SU]HUR MÁŠ 1,40
 3' [...] '20' ŠE GU
-
- 4' [... x]+4 ina NIM ina MAŠ-MAŠ ŠÚ
 5' [...] 'giš' RÍN ina TIL ITU GÍR
 6' [...] nu' 3 'KÛŠ'
 7' [...] 'x' MÚL ár
 8' [...] KÛ]Š
 9' [...] DI]R' NU PAP

Right edge (other direction)

- 1' 'x x' na
 2' GE₆ 13 7 ME
 3' 13 3,30 ŠÚ muš
 4' GE₆ 14 4 GE₆ NU [PAP]
 5' 14 11 na muš
 6' 27' 22 KUR
-
- 7' [x 3]0 13 na
 8' [x x] ŠÚ muš
 9' [x x] ME
 10' [x x x] 'x'

No. 150

BM 37105 (= 80-6-17, 854)

Photo: Pl. 69

Flake

- I'
- 1' '13' 50' NINDA na [(0)]
 2' [1]4 12 ME 'DIR' [...]
 3' 15 3,40 GE₆
 4' 27 12 KUR DIR NU PAP
 5' [ZÍ]Z 1 21 'x x' DIR NU PAP
 6' [1]3 5',30+[x] 'x'
 7' [1]4 [...]

No. 149

Flake

- 1' (traces)
 2' [...] Capricorn, 100
 3' [...] 20'. Month XII, Aquarius.
-
- 4' [... the x]+4th, last appearance in the east in Gemini.
 5' [...] Libra, at the end of the month Scorpius.
 6' [...] ... 3 cubits.
 7' [...] ... the rear star
 8' [...] cub]its.
 9' [...] clou]ds', I did not watch.

Right edge (other direction)

- 1' Sunset to moonset: ...
 2' Night of the 13th, moonrise to sunset: 7°.
 3' The 13th, moonset to sunrise: 3° 30'; measured.
 4' Night of the 14th, sunset to moonrise: 4°; I did not [watch.]
 5' The 14th, sunrise to moonset: 11°.
 6' The 27th', moonrise to sunrise: 22°.
-
- 7' [Month ...,] (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 13°.
 8' [The xth,] moonset to sunrise: [...]; measured.
 9' [Night of the xth,] moonrise to sunset: [...]
 10' [...] ...

No. 150

Flake

- I'
- 1' The 13th, sunrise to moonset: 50'.
 2' [The 1]4th, moonrise to sunset: 12°; clouds, [...]
 3' The 15th, sunset to moonrise: 3° 40'.
 4' The 27th, moonrise to sunrise: 12°; clouds, I did not watch.
 5' [Month] XI, the 1st (of which followed the 30th of the preceding month, sunset to moonset: 21° ...; clouds, I did not watch.
 6' [The 1]3th, [...] 5° 30'+[x']
 7' [The 1]4th, [...]

II'

1' G[E₆[?]]2' 'Á¹ [....]3' G[E₆[?]]

No. 151

BM 40114 (= 81-2-1, 80)

Photo: Pl. 69

Flake

1' [....] 'x¹ [....]2' [....] 'x x x IGI[?] šá še-pít MAŠ¹-[MAŠ]

3' [.... x]+3 GENNA e MÚL IGI šá še-pít MAŠ-MAŠ [....]

4' [.... n]a-su in 5 IGI GE₆ 10+'x x x¹ [....]5' [....] in[?] 25[?] GENNA ana ME E-a GAN[?] x [....]6' [.... x]+'8[?] USAN GENNA e MAŠ-MAŠ šá SIPA [....]7' [....] ————— 5 KÙŠ ana ULÙ[?] [....]8' [.... A]N[?] 1 KÙŠ ina IGI MAŠ-MAŠ IGI IGI 'KUR[?] NIM[?]-a[?] [....]9' [.... R]ÍN šá ULÙ 3 SI ár GENNA ana NIM 'GUB[?] U[Š]10' [.... ana] 'ŠÚ[?] ki UŠ-a 2/3 KÙŠ ár SA₄ 'x¹ [....]11' [.... LUGAL[?]meš SIG[?] GE₆ 22 ina ZÁLAG AN SIG MAŠ-MAŠ I[GI] '4[?] [KÙŠ]12' [.... šá ALLA] 'šá[?] ULÙ 10 SI IZI GE₆ 8 ina ZÁLAG AN [....]13' [.... MÚL] TUR šá 4 KÙŠ ár LUGAL 10[?] [....]14' [....] GE₆ 2 ina ZÁLAG AN [....]

15' [.... U]SAN AN [....]

Comments

12': the star in the beginning of the line is either θ or δ Cancri; the one broken at the end ϵ Leonis.

Date

The paragraph concerning Mars phenomena (lines 8'-10') begins with a first appearance in front of α Geminorum. The next preserved entry takes place near α Librae, and at the same time 3 fingers behind Saturn. From Mars' velocity it is likely that this is a first stationary point. A second stationary point takes place 2/3 cubit behind α Virginis. The only year that somewhat fits these conditions is SE 84. Even in this year, Mars' first station was much more than 3 fingers behind Saturn. Mars' conjunctions with Normal stars (lines 11'ff.) would then have to be those of year SE 116; the preserved entries would fit. Unfortunately, the Saturn paragraph, which ought to refer to SE 104, does not fit. Even assuming an error by one year, SE 105 does not agree completely with what is preserved on the tablet.

II'

1' Ni[ght[?]]

2' side [....]

3' Ni[ght[?]]

No. 151

Flake

1' [....] [....]

2' [....] η [?] Geminorum [....]3' [.... the x]+3rd, Saturn was [....] above η Geminorum [....]

4' [....] rising of Saturn to sunrise: [....]; (ideal) first appearance on the 5th. Night of the 10+xth, [....]

5' [....] Around[?] the 25th[?], Saturn's acronychal rising. Month IX[?], [....]6' [.... night of the x]+8th[?], first part of the night, Saturn was [....] above γ Geminorum, [....]

7' [....] ————— 5 cubits [low] to the south [....]

8' [....] Mars' first appearance 1[?] cubit in front of α Geminorum; it was bright[?] (and) high[?], [....]9' [....] it became sta[tionary] α Librae, it stood 3 fingers behind Saturn to the east [....]10' [....] when [Mars] became stationary [to the we]st[?], [it became stationary] 2/3 cubit behind α [Virginis].11' [Year, king]s [....] Month III[?], night of the 22nd, last part of the night, Mars was 4[?] cubits below α Geminorum. [....]

12' [....] 10 fingers [....] Cancr. Month V, night of the 8th, last part of the night, Mars [....]

13' [....] 10[?] [fingers] ϱ Leonis [....]

14' [....] night of the 2nd, last part of the night, Mars was [....]

15' [.... fir]st part of the night, Mars was [....]

No. 152

BM 40606 (= 81-4-28, 151)

Photo: Pl. 69

Flake

- 1' [...] (blank) [...]
 2' [...] IGI DIB in 20 GU₄-UD ina 'NIM U[D-DA ŠÚ-šú DIB [...]
 3' [...] 18' IGI GE₆ 28 USAN 'GU₄'-[UD [...]
 4' [...] 'NIM' TA 24 'ki PAP' N[U IGI [...]
 5' [...] 'x' [...]

No. 153

BM 40864 (= 81-4-28, 411)

Photo: Pl. 69

Obv.

- 1 [...] ŠÚ?
 2 [...] x]+8' MÚL-BABBAR
 3 [...] 28 MÚL-BABBAR
 4 [...] (blank)
 5 [...] itušU GE₆ 24
 6 [...] (blank)
 7 [...] GE₆ 8' USAN *dele-bat*
 8 [...] ár LUGAL 5/6 KÙŠ
 9 [...] 'x x'

'Rev.

- 1' [...] 'ME' NIM-a
 2' [...] 'DIB'?

Upper edge

- 1 [...] x GE₆?

No. 152

Flake

- 1' [...] (blank) [...]
 2' [...] first appearance [...], omitted. Around the 20th, Mercury's [last appearance] in the east [...], [omitted [...]
 3' [...] (ideal) first appearance [on] the 18th. Night of the 28th, first part of the night, Mer[cury was [...]
 4' [...] east?: from the 24th, when I watched I did not [see it [...]
 5' [...] [...]

No. 153

Obv.

- 1 [...] last appearance?
 2 [...] The x]+8th?, Jupiter's
 3 [...] The 28th, Jupiter's
 4 [...]
 5 [...] Month IV, night of the 24th,
 6 [...]
 7 [...] night of the] 8th?, first part of the night, Venus was
 8 [...] 5/6 cubit behind α Leonis
 9 [...]

'Rev.

- 1' [...] after sunrise.
 2' [...] omitted?.

Upper edge

- 1' [...] night?.

No. 154

BM 40993 (= 81-4-28,540)

Photo: Pl. 70

Flake

- 1' [x] 'x x' [...]
-
- 2' 'MU¹-1-me-30+[x-KAM]
- 3' SIG MAŠ-MAŠ I[GI]
- 4' *dele-bat* 3 U *ana* [...]
- 5' e MÚL [...]
- 6' IZI GE₆ [...]
- 7' SIG RÍN šá U[LÚ]
- 8' GE₆ 28 U[SAN]
- 9' 'x' [...]

No. 155

BM 41167 (= 81-4-28, 714)

Photo: Pl. 70

'Obv.'

- 1' [...] 'x x' [...]
- 2' [...] 'x' GE₆ 20 'x' [...]
- 3' [...] *dele-bat ina* ŠÚ *ina* RÍN [ŠÚ]
- 4' [...] 'IGI¹ APIN GE₆ 20+[x]
- 5' [...] *ina* ZÁLAG *dele-bat e* MÚL [...]
- 6' [...] KIR₄ šil PA 2 KÙŠ [...]
- 7' [...] SU]HUR MÁŠ 1 KÙŠ 4 U ŠE [....]
-
- 8' [...] A-š]ú¹ LUGAL^{meš} BAR *in* 10 GU₄-[UD]
- 9' [...] G]U₄-UD *ina* ŠÚ *ina* ALLA IGI 14¹ n[a-su]
- 10' [...] 'x' ŠU 22 ŠÚ šá GU₄-[UD]
- 11' [...] 'x GE₆ 20¹+ [x]

'Rev.'

- I'
- 1' [...] m]uš
- 2' [x x G]E₆ DIR *muš*

II'

- 1' 14 [...]
- 2' 15 [...]

No. 154

Flake

- 1' [...] [...]
-
- 2' Year 130+[x,]
- 3' below α Geminorum [...]
- 4' Venus being 3 fingers to [...]
- 5' above [...]
- 6' Month V, night of [...]
- 7' below α Librae [...]
- 8' Night of the 28th, first [part of the night,]
- 9' [...]

No. 155

'Obv.'

- 1' [...] [...]
- 2' [...] Night of the 20th, [...]
- 3' [...] Venus [last appearance¹] in the west in Libra [...]
- 4' [...] first appearance [...] Month VIII, night of the 20+[xth,]
- 5' [...] last part of the night, Venus was [...] above [...]
- 6' [...] 2 cubits [...] θ Ophiuchi [...]
- 7' [...] 1 cubit 4 fingers [...] γ/δ] Capricorni. Month XII, [...]
-
- 8' [...] kings [...] Month I, around the 10th, Mer[cury's]
- 9' [...] Mercury's first appearance in the west in Cancer; sunset to setting of Mercury: 14^o [...] [...]
- 10' [...] Month IV, the 22nd, Mercury's last appearance [...]
- 11' [...] Night of the 20+[xth,]

'Rev.'

- I'
- 1' [...] measured.
- 2' [The xth, sunset] to moonrise: [...]; measured (despite) clouds.

II'

- 1' The 14th, [...]
- 2' The 15th, [...]

No. 156

BM 41654 (= 81-6-25, 270)

Copy: LBA 1356

Photo: Pl. 70

'Obv.'

1' [...] 'x' MÚL-BABBAR [...]

2' [...] šur GIGIR] šá ULÙ UŠ NU PAP DU₆ [...]

3' [...] i]n' EN 8 MÚL-BABBAR ana NIM ki UŠ-ú

4' [...] (blank)

5' [...] GE₆ x]+5 USAN MÚL-BABBAR SIG MAŠ-MAŠ IGI 4½ KÙŠ

6' [...] 'x x x' [...] 'x x'

'Rev.'

1' [...] 'SI NIM' [...]

2' [...] 26 ina NIM ina [...]

3' [...] ana NIM ina LAL-šú e 'GÌR ár' šá A 6 SI

4' [...] 'e' SA₄ '1 KÙŠ IZI' GE₆ 4 USAN A[N]5' [...] x]+1 KÙŠ GE₆ 30 USAN AN e MÚL MURUB₄ šá SAG GÍR-TAB 4 SI6' [...] e šil PA 8' SI 'APIN' GE₆ 257' [...] SU]HUR' IGI 10 SI GE₆ 15 USAN AN' 'e' [SUH]UR 'ár' 10 'SI'

8' [...] AN e LUGAL 6 SI KIN 1+[x [...]

9' [...] GE₆ 5 ina ZÁLAG x [...]10' [...] e SA₄ šá ABSIN 1 K[UŠ [...]

11' [...] 'x' [...]

Comments

Obv. 2': Restoration of ζ Tauri based on occurrence of α Geminorum in next paragraph.

Rev. 9': The sign after ZÁLAG does not look like AN.

No. 156

'Obv.'

1' [...] Jupiter [...]

2' [...] it became stationary [...] ζ [Tauri;] I did not watch. Month VII, [...]

3' [...] around until the 8th, when Jupiter became stationary to the east,

4' [...] (blank)

5' [...] night of the x]+5th, first part of the night, Jupiter was 4½ cubits below α Geminorum.

6' [...] [...]

'Rev.'

1' [...] high to the north [...]

2' [...] 26th in the east in [...]

3' [...] while moving back to the east, was 6 fingers above β Virginis.

4' [...] 1 cubit above α (Virginis). Month V, night of the 4th, first part of the night, Mars was

5' [...] x]+1 cubits. Night of the 30th, first part of the night, Mars was 4 fingers above δ Scorpis.

6' [...] 8' fingers above θ Ophiuchi. Month VIII, night of the 25th,

7' [...] 10 fingers [...] γ Capricorni. Night of the 15th, first part of the night, Mars was 10 fingers above δ Capricorni.

8' [...] Mars was 6 fingers above α Leonis. Month VI, the 1+[xth, [...]

9' [...] night of the 5th, last part of the night, [...]

10' [...] 1 cubit above α Virginis. [...]

11' [...] [...]

No. 157

BM 41954 (= 81-6-25, 575)

Copy: LBAT 1358

Photo: Pl. 70

'Obv.'

- 1' [...] 'x' [...]
 2' [...] US]AN *dele-bat e* 'x x' [...]
 3' [...] x]+1 KÙŠ *in 19 dele-bat* ABSIN [KUR]
 4' [...] *dele-b*]at ina ŠÚ ina ABSIN TA 10 *ki* [PAP NU IGI]
 5' [...] x]+1 KÙŠ GE₆ '20'+[x]
 6' [...] GE₆] 16 US[AN]
 7' [...] e 'x' [...]
 8' [...] 'x' [...]

'Rev.'

- 1' [...] 'x' [...]
 2' [...] RÍN] 'šá' ULÙ 1+[x]
 3' [...] 'x' [x] AN SIG MÚL *e šá* SA[G GÍR-TAB ...]
 4' [...] šil PA 2/3 KÙŠ 29 AN PA KUR [...]
 5' [...] GE₆ x]+1 ina ZALÁG AN *e* MÚL IGI šá SU[HUR MÁŠ nn mm]
 6' [...] (blank)
-
- 7' [...] 'x' 13 3,40 ŠÚ DIR [...]
 8' [...] '14 3',30 na 'DIR' [...]

No. 158

BM 42007 (= 81-6-25, 629)

Copy: LBAT 1359

Obv.?'

- 1 [...] *ki* U]Š-ú 1 KÙŠ *ár 4-ÀM ár*^{rmeš1} šá PA UŠ
 2 [...] 'x x x x' [...]

'Rev.?'

- 1' [...] 'x x x x x x x'
 2' [...] G]U₄-UD' SIG MÚL *ár šá* SAG HUN 3½ KÙŠ

Comments

The 'Obverse' contains a statement about an outer planet, presumably Jupiter. It is then surprising that the text ends with Mercury on the 'Reverse'.

No. 157

'Obv.'

- 1' [...] [...]
 2' [...] first] part of the night, Venus was [...] above [...]
 3' [...] x+1 cubits. Around the 19th, Venus [reached] Virgo. [...]
 4' [...] Ven]us [last appearance] in the west in Virgo: from the 10th, when [I watched I did not see it]
 5' [...] x]+1 cubits. Night of the 20+[xth,]
 6' [...] Night] of the 16th, first [part of the night,]
 7' [...] above [...]
 8' [...] [...]

'Rev.'

- 1' [...] [...]
 2' [...] 1+[x] β Lib[rae]
 3' [...] Mars was [...] below β Scor[pis]
 4' [...] 2/3 cubit [...] θ Ophiuchi. The 29th, Mars reached Sagittarius. [...]
 5' [...] Night of the x]+1st, last part of the night, Mars was [...] above γ Capricorni. [...]
 6' [...] (blank)
-
- 7' [...] The 13th, moonset to sunrise: 3° 40'; clouds [...]
 8' [...] The 14th, sunrise to moonset: 3° 30'; clouds [...]

No. 158

Obv.?'

- 1 [...] when it] became stationary [to the east,] it became stationary 1 cubit behind the four rear ones of Sagittarius.
 2 [...] [...]

'Rev.?'

- 1' [...]
 2' [...] Mercury was 3½ cubits below α Arietis.

No. 159

BM 42021 (= 81-6-25, 643)

Copy: LBAT 1354

Photo: Pl. 70

'Obv.'

- 1' [...] x 20' [...]
 2' [...] DUR] 'nu-nu x' [...]
 3' [...] IZI in EN [...]
 4' [...] GE₆ 20 ina ZÁLAG MÚL-BABBAR ana ŠÚ ina LAL-[šú]
 5' [...] SIG MÚL IGI šá SAG HUN 3½ KÙŠ [...]
 6' [...] 'x' AB GE₆ 28 USAN MÚL-[BABBAR]
 7' [...] S]AG HUN 5 KÙŠ DIR [...]
 8' [...] (blank)

9' [...] 'x x x' [...]

'Rev.'

I and II broken;

III

- 1' [...] 'x' [...]
 2' [...] a-ka]m muš
 3' [12 x], 20 ME DIR NU PAP
 4' [12 x], 20 ŠÚ DIR NU PAP
 5' 13¹ 50 NINDA GE₆ DIR NU PAP
 6' 13 9,40 na NU PAP
 7' 'x' 14 KUR DIR muš
 8' [...] 'x' na-su
 9' [...] 'x'

IV

- 1' 13 [...]
 2' 14 [...]
 3' 14 [...]
 4' 15 [...]
 5' 27 [...]
 6' ŠE 30 [...]

No. 159

'Obv.'

- 1' [...] 20' [...]
 2' [...] [η] Piscium? [...]
 3' [...] Month V, around until [...]
 4' [...] Night] of the 20th, last part of the night, Jupiter, while moving back to the west,
 [...] [...]
 5' [...] 3½ cubits [below] β Arietis [...]
 6' [...] Month X, night of the 28th, first part of the night, Jupi[ter]
 7' [...] 5 cubits [below β/α] Arietis. Month XII₂, [...]
 8' [...] (blank)
-
- 9' [...] [...]

'Rev.'

I and II broken;

III

- 1' [...] [...]
 2' [...] measured (despite) mist.
 3' [The 12th,] moonrise to sunset: [x°] 20'; clouds, I did not watch.
 4' [The 12th,] moonset to sunrise: [x°] 20'; clouds, I did not watch.
 5' The 13th, sunset to moonrise: 50'; clouds, I did not watch.
 6' The 13th, sunrise to moonset: 9° 40'; I did not watch.
 7' The xth, moonrise to sunrise: 14°; measured (despite) clouds.
 8' [...], sunset to moonset:
 9' [...]

IV

- 1' The 13th, [...]
 2' The 14th, [...]
 3' The 14th, [...]
 4' The 15th, [...]
 5' The 27th, [...]
 6' Month XII, (the 1st of which was identical with) the 30th (of the preceding month,) [sunset to moonset:]

No. 160

BM 42106 (= 81-6-25, 728)

Copy: LBA 1357

Photo: Pl. 71

'Obv.'

- 1' [...] *ana*² MÚL 'x' [...]
 2' [...] *ina* N]IM *ina* ALLA IGI² 'GU₄'¹ [...]
 3' [...] 4½ KÙŠ APIN *in* EN [...]
 4' [...] *in* 15 GENNA *ana* ME E-a G[E₆] [...]
 5' [...] 'x GENNA x' [...]

'Rev.'

- 1' [...] *ina*] IGI GÌR *ár šá* A UŠ AB *i[n]*² [...]
 2' [...] x]+10 AN *ana* ŠÚ *ki* UŠ-a [...]
 3' [...] (blank)
 4' [...] SIG *šur* G[IGIR] [...]
 5' [...] GE₆ x]+7' *ina* Z[ÁLAG] [...]

No. 161

BM 42141 (= 81-6-25, 764)

Copy: LBA 1361

Flake

- 1' [...] 'x x x x x' [...]
 2' [...] S]IG GIŠ.KUN A 4½ KÙŠ APIN [...]
 3' [...] x]+1 KÙŠ 18 AN ABSIN 'KUR' GAN 20 AN [...]
 4' [...] A]N *ana* ŠÚ *ina* LAL-šú e 'x' [...]
 5' [...] 'x x x' [...]

No. 162

BM 42779 (= 81-7-1, 543)

Photo: Pl. 71

Side A

- 1' 'x x' [...]
 2' *ár* MÚL 'x' [...]
 3' *in* 20+[x] [...]
 4' GE₆ 20+[x] [...]
 5' *šá* U[LÙ] [...]

No. 160

'Obv.'

- 1' [...] to' [...] [...]
 2' [...] Mercury's] first appearance [in] the east in Cancer. Month II², [...]
 3' [...] 4½ cubits [...] Month VIII, around until² [...]
 4' [...] around the 15th, Saturn's acronychal rising. Ni[ght] [...]
 5' [...] Saturn [...] [...]

'Rev.'

- 1' [...] Mars [...] became stationary [...] in] front of β Virginis. Month X, ar[ound] [...]
 2' [...] the x]+10th, when Mars became stationary to the west, [...]
 3' [...] (blank)
 4' [...] below β/ζ Tau[ri] [...]
 5' [...] Night of the x]+7th, last [part of the night, [...]

No. 161

Flake

- 1' [...] [...] [...]
 2' [...] 4½ cubits below θ Leonis. Month VIII, [...]
 3' [...] x]+1 cubits. The 18th, Mars reached Virgo. Month IX, the 20th, Mars [...]
 4' [...] Mars, while moving back to the west, was [...] above [...]
 5' [...] [...] [...]

No. 162

Side A

- 1' [...] [...]
 2' behind [...] [...]
 3' around the 20+[xth, [...]
 4' Night of the 20+[xth, [...]
 5' southern [...]

- 6' 'SI¹ NIM² [...]
 7' 19¹ 'x¹ [...]
 8' *še-pit* [...]
 9' MÚL [...]
 10' 'x¹ [...]

Side B

- 1' 8 [...]

 2' MU-54- [...]
 3' *šur* SI 2¹ [...]
 4' *ša* ULÙ 1+[x ...]
 5' *ša* ULÙ 2/3¹ [KÜŠ ...]
 6' *šur* GIGIR *ša* SI [...]
 7' *e šur* GIGIR *ša* U[LÙ ...]

 8' 'MU¹-[x]+5²-'KAM x¹ [...]

Comments

B 2'ff.: a planet remaining close to β and ζ Tauri for a whole year can only be Saturn.
 However, neither SE 54 nor 118 (assuming 54 to be Arsacid era) fits these positions.

No. 163

BM 45609 (= 81-7-6, 2)

Copy: LBAT 1362

'Obv.'

- 1' [...] 'e¹ [...]
 2' [...] 'x x¹ [...]
 3' [...]
 4' [...] 'x x¹ [...]
 5' [...] 'x¹ [...]
 6' [...] x 20¹ IGI [...] 'x¹
 7' [...] 'x¹ GU₄-UD SIG [...] 'x x x¹
 8' [...] 'x x¹ [...] 'x¹
 9' [...] 28¹ USAN
 10' [...] *su muš* x
 11' [...] UŠ x
 12' [...] 'x x ŠÚ¹
 13' [...] 'x¹
 14' [...] 'x¹
 15' [...] 'x¹
 16' [...] 'x¹
 17' [...] 'x x x¹

- 6' [...]
 7' the 19th¹ [...]
 8' η/μ² Gem[inorum ...]
 9' star [...]
 10' [...]

Side B

- 1' the 8th, [...]

 2' Year 54², [...]
 3' 2 [...] β Tauri [...]
 4' 1+[x ...] ζ Tau[ri ...]
 5' 2/3¹ [cubit ...] ζ Tau[ri ...]
 6' β Tauri [...]
 7' above ζ Tauri [...]

 8' Year [x]+5², [...]

No. 163

'Obv.'

- 1' [...] above [...]
 2' [...] [...]
 3' [...]
 4' [...] [...]
 5' [...] [...]
 6' [...] (ideal) first appearance on the 20th¹ [...]
 7' [...] Mercury was [...] below [...]
 8' [...] [...]
 9' [...] night of] the 28th¹, first part of the night,
 10' [...] measured
 11' [...] it became stationary
 12' [...] last appearance
 13'-17' [...]

- 18' [...] 'x' AN² x x x
 19' [...] GE₆ 7 [x] 'x'
 20' [...] 'x' ina ZÁLAG AN [...]

'Rev.'

I (traces)

II

- 1' [GU₄] 'x NU¹ PAP
 2' [15] 19² ME *muš*
 3' 15 2,20 ŠÚ NU PAP
 4' 16 '12²¹ GE₆ NU PAP
 5' 16 [x na] 'x NU PAP¹
 6' 28 [x] 'x x x¹ PAP
 7' SIG 1 17 na² 'x x x *muš*¹
 8' 14 15 [ME] *muš*
 9' 14 'x¹ 'ŠÚ¹ *muš*
 10' 15 1² [GE₆] *muš*²
 11' 1[5 x],30 [n]a 'x x¹
 12' 20+[x] 18² KUR NU PAP
 13' [ŠU] 'x x x¹
 14' [x] 'x¹ [...] NU PAP
 15' [...] *muš*
 16' [...] x *muš*
 17' [...] 'x x¹
 18' [...] 'x¹

III

- 1' 'x x x x x x¹
 2' 'KIN¹ 1 13²,20 KUR₄²
 3' 12 5,30 ŠÚ *muš*
 4' 13 6,30 ME *muš*
 5' 13 10 UŠna *muš*
 6' 14 4 GE₆ *muš*
 7' 26 17² KUR ŠÚ² *muš*
 8' DU₆ 30 x a-kam
 9' 'x x x x¹
 10' 12 9,40 ŠÚ NU PAP
 11' 13 10,30 [ME] NU PAP
 12' 13 11,20² na NU PAP
 13' 14 [x] 'GE₆ NU PAP¹
 14' 27 21 [KUR] *muš*
 15' APIN 1 x x KUR₄ ana šamáš [S]IG
 16' 12 1,30 ŠÚ *muš*
 17' 13 3.20 'x¹

- 18' [...] Mars²
 19' [...] Night of the 7th, [...]
 20' [...] last part of the night, Mars was [...]

'Rev.'

I traces)

II

- 1' [Month II,]; I did not watch.
 2' [The 15th,] moonrise to sunset: 19°²; measured.
 3' The 15th, moonset to sunrise: 2° 20'; I did not watch.
 4' The 16th, sunset to moonrise: 12°²; I did not watch.
 5' The 16th, [sunrise to moonset:]; I did not watch.
 6' The 28th, [moonrise to sunrise:] watch.
 7' Month III, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 17°;, measured.
 8' The 14th, [moonrise to sunset:] 15°; measured.
 9' The 14th, moonset to sunrise:; measured.
 10' The 15th, [sunset to moonrise:] 1°²; measured².
 11' The 1[5th, sunrise] to moonset: [x°] 30';
 12' The 20+[xth,] moonrise to sunrise: 18°²; I did not watch.
 13' [Month IV,]
 14' [...] [....] I did not watch.
 15' [...] measured.
 16' [...] measured.
 17' [...]
 18' [...]

III

- 1'
 2' Month VI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 13°² 20'; it was bright².
 3' The 12th, moonset to sunrise: 5° 30'; measured.
 4' The 13th, moonrise to sunset: 6° 30'; measured.
 5' The 13th, sunrise to moonset: 10°; measured.
 6' The 14th, sunset to moonrise: 4°; measured.
 7' The 26th, moonrise to sunrise: 17°²; overcast², measured.
 8' Month VII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:), mist,
 9'
 10' The 12th, moonset to sunrise: 9° 40'; I did not watch.
 11' The 13th, [moonrise to sunset:] 10° 30'; I did not watch.
 12' The 13th, sunrise to moonset: 11° 20'²; I did not watch.
 13' The 14th, sunset to moonrise: [...]; I did not watch.
 14' The 27th, moonrise to sunrise: 21°; measured.
 15' Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:); it was bright, it was low to the sun.
 16' The 12th, moonset to sunrise: 1° 30'; measured.
 17' The 13th, [moonrise to sunset:] 3° 20'.

18' 13 12 *na muš*
 19' 14 8 *GE₆ muš*
 20' 26² 23 *KUR [x]*

IV

1' 'x x x x x'
 2' 13 6,20 ŠÚ NU PAP
 3' 14 12,50 ME NU PAP
 4' 14 4,20 *na* NU PAP
 5' 15 9,20 *GE₆* NU PAP
 6' 27 12,50 KUR NU PAP
 7' ZÍZ 1 22,50 NU PAP
 8' 13 11 ME NU PAP
 9' 13 4 ŠÚ NU [PAP]
 10' 14 40 NINDA G[E₆]
 11' 14 5 *na*² [x]
 12' 27 18 KUR NU [PAP]
 13' ŠE 30 19 x 'x' [....]
 14' 14 10 UŠ [ME]
 15' 14 5,20² [ŠÚ]
 16' 15 3,10+[x *GE₆*]
 17' 15 'x' [*na*]
 18' 20+[x]
 19' DIR-[ŠE]

Comments

Because of deterioration this tablet could not be collated.

No. 164

BM 45815 (= 81-7-6, 236)

Photo: Pl. 71

Flake

I broken;

II

1' [.... *m*]uš
 2' [....] 'x' UD²
 3' [....] 'x'

III

1' [....] 'x'
 2' [DU₆] *ina* GUB IGI
 3' [12] 'x' ŠÚ
 4' [1]3 2,30 ME *a-kam muš*

18' The 13th, sunrise to moonset: 12°; measured.
 19' The 14th, sunset to moonrise: 8°; measured.
 20' The 26th¹, moonrise to sunrise: 23°; [....]

IV

1'
 2' The 13th, moonset to sunrise: 6° 20'; I did not watch.
 3' The 14th, moonrise to sunset: 12° 50'; I did not watch.
 4' The 14th, sunrise to moonset: 4° 20'; I did not watch.
 5' The 15th, sunset to moonrise: 9° 20'; I did not watch.
 6' The 27th, moonrise to sunrise: 12° 50'; I did not watch.
 7' Month XI, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 22° 50'; I did not watch.
 8' The 13th, moonrise to sunset: 11°; I did not watch.
 9' The 13th, moonset to sunrise: 4°; I did not [watch.]
 10' The 14th, sunset to moonrise: 40'; [....]
 11' The 14th, sunrise to moonset: 5°; [....]
 12' The 27th, moonrise to sunrise: 18°; I did not [watch.]
 13' Month XII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 19°; [....]
 14' The 14th, [moonrise to sunset:] 10°; [....]
 15' The 14th, [moonset to sunrise:] 5° 20'; [....]
 16' The 15th, [sunset to moonrise:] 3° 10+[x']; [....]
 17' The 15th, [sunrise to moonset:] [....]
 18' The 20+[xth,]
 19' Month XII₂, [....]

No. 164

Flake

I (broken);

II

1' [.... *mea*]sured.
 2' [....]
 3' [....]

III

1' [....]
 2' [Month VII,] it could be seen while (the sun) stood there.
 3' [The 12th,] moonset to sunrise:
 4' [The 1]3th, moonrise to sunset: 2° 30'; measured (despite) mist.

- 5' 13 9 *na muš*
 6' 14 7 *GE₆*
 7' 27 13 *KUR DIR muš*
 8' APIN 30 13,10+[x]
 9' DIR [....]
 10' [1]3 '4+x' 'x' [....]

IV

- 1' [....] 'x' [....]
 2' ZÍZ 30 12 'na-su' [....]
 3' 14 11 *ME D[IR]*
 4' 14 6,30 *ŠÚ D[IR]*
 5' 15 4? *GE₆ [....]*
 6' 16^{sic} 6 *n[a]*
 7' 28 12+[x]
 8' ŠE 1 'x' [....]

No. 165

BM 45824 (= 81-7-6, 245)

Photo: Pl. 71

Flake

I and II broken;

III

- 1 [....] 'x x'
 2 [....] 'x'
 3 [....] 'x x'
 4 [....] 'x x x'
 5 [....] 5 'GE₆' *muš²*
 6 [2]7² 21 *KUR KUR₄ muš²*
 7 [MN x] 11² ki PAP NU IGI
 8 [x x],30 *ME muš*
 9 [x x],40 *ŠÚ muš*
 10 [x x] *GE₆ muš*
 11 [x x] *na muš*
 12 [x x x] 'x'

IV

- 1 ZÍZ [....]
 2 [....]

- 5' The 13th, sunrise to moonset: 9°; measured.
 6' The 14th, sunset to moonrise: 7°.
 7' The 27th, moonrise to sunrise: 13°; measured (despite) clouds.
 8' Month VIII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 10+[x']
 9' clouds, [....]
 10' [The 1]3th, [....] 4+x° [....]

IV

- 1' [....] [....]
 2' Month XI, (the 1st of which was identical with) the 30th (of the preceding month,) sunset to moonset: 12°, [....]
 3' The 14th, moonrise to sunset: 11°; cl[ouds]
 4' The 14th, moonset to sunrise: 6° 30'; cl[ouds,]
 5' The 15th, sunset to moonrise: 4° [....]
 6' The 16th,^{sic} sunrise to moonset: 6° [....]
 7' The 28th, [moonrise to sunrise:] 12+[x°]
 8' Month XII, the 1st (of which followed the 30th of the preceding month,) [sunset to moonset:] [....]

No. 165

Flake

I and II broken;

III

- 1-4 [....]
 5 [....] sunset to moonrise: 5°; measured.
 6 [The 2]7th², moonrise to sunrise: 21°; it was bright, measured.
 7 [Month sunset to moonset:] 11°; when I watched I did not see it.
 8 [The xth,] moonrise to sunset: [x°] 30'; measured.
 9 [The xth,] moonset to sunrise: [x°] 40'; measured.
 10 [The xth,] sunset to moonrise: [....]; measured.
 11 [The xth,] sunrise to moonset:]; measured.
 12 [....]

IV

- 1 Month XI, [....]
 2 [....]

- 3 10+[x]
 4 10+[x]
 5 10+[x]
 6 27² 15+[x]
 7 ŠE 30 13,30² [....]
 8 14 12,10 ŠÚ 'x' [....]
 9 15 2²,50 ME [....]
 10 15 3,20 [na]
 11 16 '8² [....]
 12 20+[x]

No. 166

BM 45877 (= 81-7-6, 308)

Photo: Pl. 71

Flake

- 1' [....] 'USAN² *dele-bat*² e MÚL² [....]
 2' [....] SI]G MAŠ-MAŠ IGI 3½ KÙŠ GE₆ 'x' [....]
 3' [....] šá ALLA šá ULÙ 2/3 KÙŠ [....]
 4' [....] 'e' LUGAL 2/3 KÙŠ GE₆ 22+[x]
 5' [....] '2/3² [KÙŠ] GE₆ 15 USAN [....]
 6' [....] 'x' ½ K[ÙŠ] IZI GE₆ 11 U[SAN]
 7' [....] 2 KÙŠ GE₆ 10 U[SAN]
 8' [....] '*dele-bat*² ina NIM ina 'RÍN² [IGI]

No. 167

BM 45880 (= 81-7-6, 311)

Photo: Pl. 71

'Obv.'

- 1' [....] 'x' [....]
 2' [....] MÚL IGI [....]
 3' [....] 'x x x' [....]
 4' [....] 'x x' [....]
 5' [....] 'x' [....]

- 3-5 The 10+[xth,]
 6 The 27th. [moonrise to sunrise:] 15+[x°]
 7 Month XII, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) 13° 30' [....]
 8 The 14th, moonset to sunrise: 12° 10'; [....]
 9 The 15th, moonrise to sunset: 2° 50'; [....]
 10 The 15th, [sunrise to moonset:] 3° 20'; [....]
 11 The 16th, [sunset to moonrise:] 8° [....]
 12 The 20+[xth,]

No. 166

Flake

- 1' [....] first part of the night, Venus was [....] above [....]
 2' [....] 3½ cubits below α Geminorum. Night of the xth, [....]
 3' [....] 2/3 cubit [.... θ/δ] Cancr. [....]
 4' [....] 2/3 cubit above α Leonis. Night of the 22+[xth,]
 5' [....] 2/3² cubit [....] Night of the 15th, first part of the night, [....]
 6' [....] ½ cubit [....] Month V, night of the 11th, first [part of the night,]
 7' [....] 2 cubits [....] Night of the 10th, first [part of the night,]
 8' [....] Venus' [first appearance] in the east in Libra [....]

No. 167

'Obv.'

- 1' [....] [....]
 2' [....] the front star of [....]
 3'-5' [....] [....]

'Rev.'

I broken;

II

- 1' [...] 'x' *muš*
 2' [...] 'x' DIR *muš*
 3' [...] 'x' DIR *muš*
 4' [...] DIR NU PAP
 5' [...] 'x' DIR NU² PAP²
 6' [...] 'x' *muš*
 7' [...] DIR NU PAP
 8' [...] 'a'-*pir muš*
 9' [...] 'x'

III

- 1' [2]8' [...]
 2' KIN 3[0 ...]
 3' 13 2+[x ME ...]
 4' 13 1',10 [ŠÚ ...]
 5' 14 2,20 'GE₆' [...]
 6' 14 14 *na* [...]
 7' 27 20 KUR 'x' [...]
 8' DU₆ 1 13 *muš*
 9' 12 8 ŠÚ
 10' 13 6 ME DIR *muš*
 11' '13' 'x' *na* DIR *muš*

IV

- 1' ZÍZ [...]
 2' 13 'x' [...]
 3' 10+[x ...]

No. 168

BM 46098 (= 81-7-6, 547)

Photo: Pl. 72

Flake

- 1' [...] 'x x' [...]
 2' [...] *ina* ZÁLAG *dele-bat* SIG 'MÚL ár' [šá še-pít MAŠ-MAŠ ...]
 3' [...] *ina* ZÁLAG *dele-bat* SIG MAŠ-MAŠ IGI [...]
 4' [...] šá ALLA šá ULÙ 10' SI' [...]
 5' [...] GE₆ x]+12 *ina* ZÁLAG *dele-bat* SIG MÚL TU[R šá 4 KÙŠ ár LUGAL ...]
 6' [...] *ina* ZÁLAG *dele-bat e* GÌR ár [šá A ...]
 7' [...] *dele*-bat e SA₄ [šá ABSIN ...]
 8' [...] GE₆ x]+4 *ina* ZÁLAG *dele*-bat [...]

'Rev.'

I broken;

II

- 1' [...]; measured.
 2' [...]; measured (despite) clouds.
 3' [...]; measured (despite) clouds.
 4' [...]; clouds, I did not watch.
 5' [...]; clouds, I did not watch.
 6' [...] measured.
 7' [...]; clouds, I did not watch.
 8' [...] earthshine, measured.
 9' [...]

III

- 1' [The 2]8th, [...]
 2' Month VI, (the 1st of which was identical with) the 30th (of the preceding month, sunset to moonset:) [...]
 3' The 13th, [moonrise to sunset:] 2+[x° ...]
 4' The 13th, [moonset to sunrise:] 1° 10' [...]
 5' The 14th, sunset to moonrise: 2° 20' [...]
 6' The 14th, sunrise to moonset: 14° [...]
 7' The 27th, moonrise to sunrise: 20° [...]
 8' Month VII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 13°; measured.
 9' The 12th, moonset to sunrise: 8°.
 10' The 13th, moonrise to sunset: 6°; measured (despite) clouds.
 11' The 13th, sunrise to moonset: measured (despite) clouds.

IV

- 1' Month XI, [...]
 2' The 13th, [...]
 3' The 10+[xth, ...]

No. 168

Flake

- 1' [...] [...]
 2' [...] last part of the night, Venus was [...] below μ Gemi[norum ...]
 3' [...] last part of the night, Venus was [...] below α Geminorum [...]
 4' [...] 10? fingers [...] θ/δ] Cancr[is] [...]
 5' [...] Night of the x]+12th, last part of the night. Venus was [...] below ρ [Leonis ...]
 6' [...] last part of the night, Venus was [...] above β Vi[rginis] ...]
 7' [...] Ve[nus] was [...] above α [Virginis] ...]
 8' [...] Night of the x]+4th, last part of the night, Ve[nus] ...]

No. 169

BM 46100 (= 81-7-6,549)

Photo: Pl. 72

Flake

- 1' [...] (traces)
 2' [...] (traces)
-
- 3' [...] ¹a¹ LUGAL¹ BAR 5 *ina* NIM *ina* HUN¹ ŠÚ¹ 14¹ [...]
 4' [...] *i*n¹ 25 *ina* ŠÚ *ina* MAŠ-MAŠ IGI KUR 15 *n*[*a-su* [...]
 5' [...] G]E₆ 26 USAN SIG MAŠ-MAŠ IGI 1+[x KŪŠ [...]
 6' [...] USAN SIG MAŠ-MAŠ *ár* 2½ K[ŪŠ [...]
 7' [...] SIG MŪL *ár* šá ALLA šá UL[Ū [...]
 8' [...] SIG SAG A 5¹ KŪ[Š [...]
 9' [...] (traces) [...]

Comments

The name of Mercury is not repeated, so this tablet may contain planetary observations, not organised as a Goal Year text.

No. 170

BM 46103 (= 81-7-6,552+613)

Photo: Pl. 72

Flake

I

- 1' [...] G]UB¹
 2' [...] DI]R¹ *muš*
 3' [...] DIB
 4' [...] NI]M-a
 5' [...] šá¹ DIB

II

- 1' 15 [...]
 2' 16 8 [...]
 3' 27 17 K[UR [...]
 4' ŠÚ 1 22 *na*-¹*su*¹
 5' KUR₄ *a-pir muš ina* GUB¹ IGI¹ ¹*ana*¹ šámaš¹ SIG¹
 6' 13 12 ŠÚ *a-kam muš*
 7' 14 10 UŠ ME *a-kam muš*
 8' [1]4 3 *na muš*
 9' ¹15¹ 2 GE₆ *muš*
 10' [x x]+2 KUR *muš*

No. 169

Flake

1'-2' [...] (traces)

- 3' [...] king [...] Month I, the 5th, last appearance in the east in Aries¹. The 14th¹. [...]
 4' [...] ar]ound¹ the 25th, first appearance in the west in Gemini; it was bright, sunset to setting of Mercury: 15° [...]
 5' [...] Ni]ght of the 26th, first part of the night, it was 1+[x cubits] below α Geminorum [...]
 6' [...] first part of the night, it was 2½ cubits below β Geminorum [...]
 7' [...] it was [...] below δ Cancri [...]
 8' [...] 5¹ cubits below ε Leonis [...]
 9' [...] ... [...]

No. 170

Flake

I

- 1' [...] stood¹
 2' [...] measured (despite) clouds¹
 3' [...] omitted.
 4' [...] after] sunrise.
 5' [...] which was omitted.

II

- 1' The 15th, [...]
 2' The 16th, [...] 8° [...]
 3' The 27th, moonrise to sunrise: 17° [...]
 4' Month IV, the 1st (of which followed the 30th of the preceding month,) sunset to moonset: 22°;
 5' it was bright, earthshine, measured; it could be seen while (the sun) stood there; it was low¹ to the sun¹
 6' The 13th, moonset to sunrise: 12°; measured (despite) mist.
 7' The 14th, moonrise to sunset: 10°; measured (despite) mist.
 8' The 14th, sunrise to moonset: 3°; measured.
 9' The 15th, sunset to moonrise: 2°; measured.
 10' [The xth,] moonrise to sunrise: [x]+2°; measured.

III

1'	[...]	<i>a-kam muš</i>	
2'	[x	x	KU]R DIR NU PAP
3'	[...]	11,50	DIR NU PAP
4'	13	9,50	ME DIR NU PAP
5'	13	9,20	ŠÚ DIR NU PAP
6'	14	2	GE ₆ DIR NU PAP
7'	14	6,40	<i>na</i> NU PAP
8'	'x	x ¹	KUR DIR NU PAP

IV

1'	13	[x	ŠÚ]
2'	14	1+[	GE ₆]
3'	14	10 U[š	<i>na</i>]
4'	27	17,30	[KUR]
5'	ŠE 1 24	[....]	
6'	12	6,20+[x	ŠÚ....]
7'	13	8	[ME]
8'	13	5,[x	<i>na</i>]
9'	14	1+[x	GE ₆]
10'	20+[x]	

No. 171

BM 46126 (= 81-7-6, 579)

Photo: Pl. 72

Flake

1'	[...]	SAG ¹ HUN ² [...]
2'	[...]	<i>ina</i> MÚL-MÚL I[GI ¹]
3'	[...]	DIB ¹ ŠU 'x ¹ [...]
4'	[...]	'x ¹ <i>in</i> ² 6 'x ¹ [...]
5'	[...]	G]U ₄ -UD <i>ina</i> NIM <i>ina</i> 'x ¹ [...]
6'	[...]	'x ¹ <i>in</i> 6 G[U ₄ -UD]
7'	[...]	<i>in</i> x] šá APIN IGI [...]
8'	[...]	NIM]-a 20 <i>na-su</i> [...]
9'	[...]	<i>ina</i> zib ^{me} IGI KUR [...]
10'	[...]	x]+6'-KAM 'x [...]
11'	[...]	SIG S]I MÁŠ 2/3 [KÚŠ]
12'	[...]	<i>ana</i>] 'ME E-a' [...]

Comments

10': This line begins a new planetary paragraph; one expects Saturn.

III

1'	[...]	measured (despite) mist.
2'	[The xth, moonrise]	to sunrise: [...] clouds, I did not watch.
3'	[Month, sunset to moonset:]	11° 50'; clouds, I did not watch.
4'	The 13th,	moonrise to sunset: 9° 50'; clouds, I did not watch.
5'	The 13th,	moonset to sunrise: 9° 20'; clouds, I did not watch.
6'	The 14th,	sunset to moonrise: 2°; clouds, I did not watch.
7'	The 14th,	sunrise to moonset: 6° 40'; I did not watch.
8'	The xth,	moonrise to sunrise:; clouds, I did not watch.

IV

1'	The 13th,	[moonset to sunrise:]
2'	The 14th,	[sunset to moonrise:] 1+[x°]
3'	The 14th,	[sunrise to moonset: 10° [...]
4'	The 27th,	[moonrise to sunrise:] 17° 30' [...]
5'	Month XII, the 1st (of which followed the 30th of the preceding month.)	[sunset to moonset:] 24° [...]
6'	The 12th,	[moonset to sunrise:] 6° 20+[x';]
7'	The 13th,	[moonrise to sunset: 8°; [...]
8'	The 13th,	[sunrise to moonset:] 5° [...]
9'	The 14th,	[sunset to moonrise:] 1+[x°;]
10'	The 20+[xth,]	

No. 171

Flake

1'	[...]	Arietis ¹ [...]
2'	[...]	first ¹ appearance [...] in Taurus [...]
3'	[...]	omitted ¹ . Month IV, [...]
4'	[...]	.... Around the 6th, [...]
5'	[...]	M]ercury's [...] in the east in [...]
6'	[...]	Around the 6th, Mer[cury's]
7'	[...]	(ideal) first appearance [on the xth] of month VIII. [...]
8'	[...]	it was hi]gh. interval between Mercury's appearance and sunrise/sunset: 20° [...]
9'	[...]	first appearance [...] in Pisces: it was bright. [...]
10'	[...]	x]+6, [king] [...]
11'	[...]	2/3 cubit [below] β Capricorni [...]
12'	[...]	acronychal rising. [...]

No. 172

BM 46180 + 46217 (81-7-6, 641 + 679)

Photo: Pl. 72

'Obv.:'

- 1' [...] ZÁLAG[?] [...]
 2' [...] 'x' ŠÚ[?] 'x' [...]
 3' [...] *ina* ZÁLAG 'x x' [...]
 4' [...] 'x' DU₆ GE₆ 7 *ina* ZÁLAG 'x' [...]
 5' [...] KÙŠ APIN GE₆ 29 *ina* ZÁLAG 'x' [...]
 6' [...] 'x' KÙŠ AB GE₆ 9[?] *ina* ZÁLAG[?] [...]

'Rev.:'

- 1' [...] 'x' [GEN]NA *ana* [NIM *ki* UŠ-ú]
 2' [...] 'x' UŠ GU₄[?] 5[?] GENNA *ana* [ME E-a]
 3' [...] 'ŠÚ[?] *ki* UŠ-a *ina* TIL PA UŠ [...]
 4' [...] GEN]NA *ina* MÁŠ ŠÚ AB 10+[x]
 5' [...] 'x' *ina* ZÁLAG GENNA 'x' [...]

Comments

This tablet is badly preserved, and its writing very slanted. I assume the obverse to contain Venus (or Mercury) data; the reverse deals with Saturn.

No. 173

BM 46212 (= 81-7-6, 673)

Photo: Pl. 72

'Obv.:'

- 1' 'x' [...]
 2' *ša še-pít* MAŠ-MAŠ 1 K[ÙŠ]
 3' SIG MAŠ-MAŠ IGI 3 K[ÙŠ]
 4' GE₆ 25 USAN *dele-bat* [...]
 5' SIG MÚL TUR *ša* 4 KÙŠ á[r LUGAL]
 6' KIN GE₆ 5 *ina* ZÁLAG *de[le-bat*]
 7' SIG GIŠ.KUN A 5½ K[ÙŠ]
 8' *dele-bat* 2 U *ana* NIM DIB 'x' [...]
 9' *dele-bat* 4 U *ana* ŠÚ LAL G[E₆]
 10' [*dele-bat* nn] 'U' *ana* ŠÚ LAL [...]
 11' [...] 'x' [...]

No. 172

'Obv.:'

- 1' [...] last part of the night[?], [...]
 2' [...] [...]
 3' [...] last part of the night, [...]
 4' [...] Month VII, night of the 7th, last part of the night, [...]
 5' [...] cubits [...] Month VIII, night of the 29th, last part of the night, [...]
 6' [...] cubits [...] Month X, night of the 9th[?], last part of the night, [...]

'Rev.:'

- 1' [...] [when] Saturn [became stationary] to [the east,]
 2' [...] it became stationary [...] Month II[?], the 5th, Saturn's [acronychal rising[?]]
 3' [...] when [Saturn] became stationary to the west, it became stationary in the end of Sagittarius [...]
 4' [...] Saturn's last appearance in Capricorn. Month X, the 10+[xth,]
 5' [...], last part of the night, Saturn was [...]

No. 173

'Obv.:'

- 1' [...]
 2' 1 cubit [...] η/μ] Geminorum [...]
 3' 3 cubits below α Geminorum [...]
 4' Night of the 25th, first part of the night, Venus was [...]
 5' below ρ Leon[is]
 6' Month VI, night of the 5th, last part of the night, [...]
 7' 5½ cubits below θ Leonis [...]
 8' Venus having passed 2 fingers to the east [...]
 9' Venus being 4 fingers back to the west. Ni[ght]
 10' [Venus] being [nn] fingers back to the west [...]
 11' [...] [...]

‘Rev.’

- 1' 'x x' [...]
 2' a-kám muš šámaš² ina² [...]
 3' ki E-a ana U[LÜ²]
 4' u KUR ana ZÁLAG-ru T[AB²]
 5' in '36¹ ME ana [ŠÚ šámaš]

Comments

Rev. 2': I assume a solar eclipse because it took place in daytime (l. 5') and could be observed at least partly.

3': or read 1 instead of *ana*; 1 S[I²] 'one finger' ?

No. 174

BM 46218 (= 81-7-6, 680)

Photo: Pl. 72

Flake

- 1' [...] 'x x' [...]
 2' [...] 'USAN' GU₄-UD e MÚL [...]
 3' [...] 'USAN' GU₄-UD e MAŠ-MAŠ šá SIPA 4 [KÜŠ]
 4' [...] nn na²-su in 12 IGI ŠU² 2 'GU₄-UD ina NIM² [ina x ŠÚ]
 5' [...] 'x x' 13 na šá GU₄-UD in 17 G[U₄-UD]
 6' [...] 'x ina ALLA² IGI KUR NIM-a 19 na-su in 10+[x IGI]
 7' [...] nn na šá GU₄-UD in 28 GU₄-UD ina NIM ina RÍN ŠÚ [...]
 8' [...] nn na šá GU₄-UD in 4 GU₄-UD ina ŠÚ ina TIL [x ŠÚ]
 9' [...] 'x' in 16 IGI GE₆ 21 ina ZÁLAG GU₄-U[D]
 10' [...] 'MÚL² ár² [šá] 'SUHUR' MÁŠ 2 [...]

No. 175

BM 77222 (= 83-6-30, 2)

Photo: Pl. 73

‘Obv.’

- 1' [...] 'x x x' [...]
 2' [...] G[U₄ 1 8 na dele-bat in [...]
 3' [...] KUR N[IM]-a¹ 9,30 na-'su¹ [...]
 4' [...] 'x' GE₆ 5 ina ZÁLAG dele-bat S[IG]

‘Rev.’

- 1' [...]
 2' measured (despite) mist. When the sun² from² [...]
 3' came out, to s[outh²]
 4' and east it b[egan²] to clear [...]
 5' At 36° before [sunset.]

No. 174

Flake

- 1' [...] [...]
 2' [...] first part of the night, Mercury was [...] above [...]
 3' [...] first part of the night, Mercury was 4 [cubits] above γ Geminorum [...]
 4' [...] rising [of Mercury to sunrise: nn°;] (ideal) first appearance on the 12th. Month IV², the 2nd, Mercury's [last appearance] in the east [in]
 5' [...] the xth, sunset to setting of Mercury: 13°. Around the 17th², [Mercury's last appearance in the west]
 6' [...] first appearance [in the east in] Cancer²; it was bright (and) high, rising of Mercury to sunrise: 19°; [(ideal) first appearance] on the 10+[xth]
 7' [...] rising of Mercury to sunrise: [nn°.] Around the 28th, Mercury's last appearance in the east in Libra [...]
 8' [...] sunset to setting of Mercury: [nn°.] Around the 4th, Mercury's [last appearance] in the west in the end of [...]
 9' [...] (ideal) first appearance on the 16th. Night of the 21st, last part of the night, Mercury [...]
 10' [...] 2 [...] δ² Capricorni [...]

No. 175

‘Obv.’

- 1' [...] [...]
 2' [...] Mo]nth II, the 1st, sunset to setting of Venus: 8°. Around [the xth,]
 3' [...] it was bright (and) high, rising of Venus to sunrise: 9° 30' [...]
 4' [...] Night of the 5th, last part of the night, Venus was [...] be[low]

- 5' [...] *še-pit* MAŠ-MAŠ 1 KÙŠ [...]
 6' [...] *ina* ZÁLAG *dele-bat* SIG MAŠ-MAŠ [...]
 7' [...] *dele-bat* [x] MÚL *ár šá* [ALLA ...]

‘Rev.’

- 1' [...] *m*uš
 2' [...] G₆E₆
 3' 27 19 KUR *muš*
 4' DU₆¹ 1 9 *na-su*
 5' SIG *muš ana šámaš* SIG

No. 176

CBS 717

Copy (by O. Neugebauer): Pl. 73

Only Lunar Six preserved.

Flake

I'

- 1 [...] 'x' SIG *a-kam*
 2 *muš ana šámaš* NIM
 3 [x] 10 UŠ ME *muš*
 4 [x] '8⁷¹ ŠÚ *muš*
 5 [x] 2 GE₆ *muš*
 6 [x] 8 *na muš*
 7 [x x]+1 KUR *a-kam muš*

II'

- 1 GAN¹ [...]
 2 [...]
 3 11 13 [ŠÚ ...]
 4 12 1, 20+[x *na* ...]
 5 13 3 [(x) ME ...]
 6 14 5+[x GE₆ ...]
 7 'x' [...]

No. 177

Rm 768

Photo: Pl. 73

Flake

I'

- 1' [...] *mu*š
 2' [...] 'a'-*kam muš*

- 5' [...] 1 cubit [...] η/μ] Geminorum. [...]
 6' [...] last part of the night, Venus was [...] below [α/β] Geminorum [...]
 7' [...] Venus was [...] γ/δ] Cancri [...]

‘Rev.’

- 1' [...] mea]sured.
 2' [..., sunset] to moonrise: [...]
 3' The 27th. moonrise to sunrise: 19°; measured.
 4' Month VII¹, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 9°;
 5' it was faint. measured: it was low to the sun.

No. 176

Flake

I'

- 1 [Month ...] ..., it was faint; measured (despite) mist;
 2 it was low to the sun.
 3 [The xth,] moonrise to sunset: 10°; measured.
 4 [The xth,] moonset to sunrise: 8°¹; measured.
 5 [The xth,] sunset to moonrise: 2°; measured.
 6 [The xth,] sunrise to moonset: 8°; measured.
 7 [The xth,] moonrise to sunrise: [x]+1°; measured (despite) mist.

II'

- 1 Month IX¹, [...]
 2 [...]
 3 The 11th. [moonset to sunrise:] 13° [...]
 4 The 12th. [sunrise to moonset:] 1° 20+[x' ...]
 5 The 13th. [moonrise to sunset:] 3° [...]
 6 The 14th. [sunset to moonrise:] 5+[x° ...]
 7 ... [...]

No. 177

Flake

I'

- 1' [...] mea]sured.
 2' [...] measured (despite) mist.

- 3' [...] 'x' *muš*
 4' [...] KUR *muš*
-
- 5' [...] x]+2,40 'KUR₄ *muš*¹ *ana šamaš* SIG
 6' [...] 'muš¹

II'

- 1' 10+[x]
 2' 14 50 [...] *muš*
 3' 15 9.20' [...] *muš*
 4' 26 25 [...] *muš*

- 5' APIN 1 24 [...] *muš*
 6' 12 [...] *muš*

No. 178

Rm 835

Photo: Pl. 73

'Obv.'

- 1' [...] *ana*] 'ŠÚ¹ *ki* UŠ-¹*a* 2¹ [...] *muš*
 2' [...] 'x' EN 27 GENNA *ana* NI[M *ki* UŠ-¹*u* [...] *muš*
 3' [...] S[e-¹*lu*¹-*ku* LUGAL *itu*[...] *muš*

'Rev.'

I

- 1' [...] 'x x' [...] *muš*
 2' [...] *u na*
 3' [...] ME *u* GE₆
 4' [...] ŠÚ¹ *u na*
 5' [...] ME *u* GE₆
 6' [...] ŠÚ¹ *u na*

II

- 1' 'x' [...] *muš*
 2' 13 [x ME [...] *muš*
 3' 13 1,40 [ŠÚ [...] *muš*
 4' 14 6.30 [GE₆ [...] *muš*
 5' 14 10 *n[a* [...] *muš*
 6' 27¹ '14¹ 'a¹ [...] *muš*

- 3' [...] measured.
 4' [...] moonrise to sunrise: [...] measured.
-
- 5' [Month, sunset to moonset: x]+2° 40'; it was bright, measured; it was low to the sun.
 6' [...] measured.

II'

- 1' The 10+[xth,]
 2' The 14th, [...] 50' [...] *muš*
 3' The 15th, [...] 9° 20' [...] *muš*
 4' The 26th, [moonrise to sunrise:] 25° [...] *muš*

- 5' Month VIII, the 1st (of which followed the 30th of the preceding month, sunset to moonset:) 24° [...] *muš*
 6' The 12th, [...] *muš*

No. 178

'Obv.'

- 1' [...] when [Saturn] became stationary [to the] west, [...] *muš*
 2' [...] until the 27th, [when] Saturn [became stationary] to the east, [...] *muš*
 3' [...] king Seleucus. Month [...] *muš*

'Rev.'

I


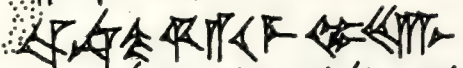
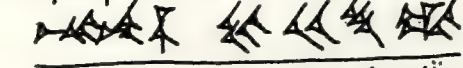
- 1' [...] [....]
 2' [...] 'moonset to sunrise' plus 'sunrise to moonset': [...] *muš*
 3' [...] 'moonrise to sunset' plus 'sunset to moonrise': [...] *muš*
 4' [...] 'moonset' to sunrise plus 'sunrise to moonset': [...] *muš*
 5' [...] 'moonrise to sunset' plus 'sunset to moonrise': [...] *muš*
 6' [...] 'moonset to sunrise' plus 'sunrise to moonset': [...] *muš*

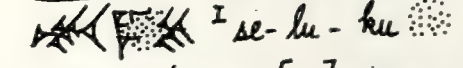
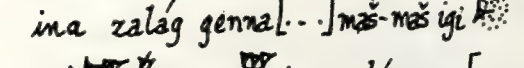

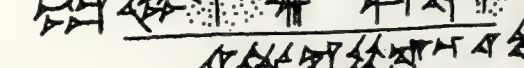
II

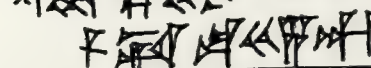
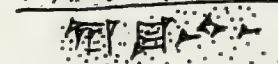
- 1' [....]
 2' The 13th, [moonrise to sunset:]
 3' The 13th, [moonset to sunrise:] 1° 40' [...] *muš*
 4' The 14th, [sunset to moonrise:] 6° 30' [...] *muš*
 5' The 14th, sunrise to [moonset:] 10° [...] *muš*
 6' The 27th¹, (moonrise to sunrise:) 14°⁰¹ [....] *muš*

PLATES

Face A


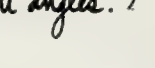

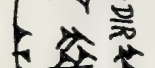
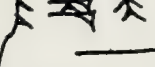
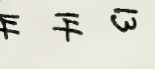
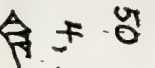
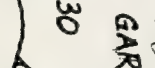
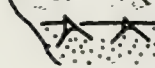
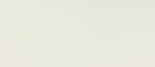

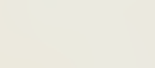
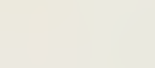
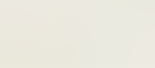


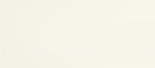
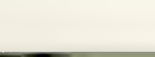




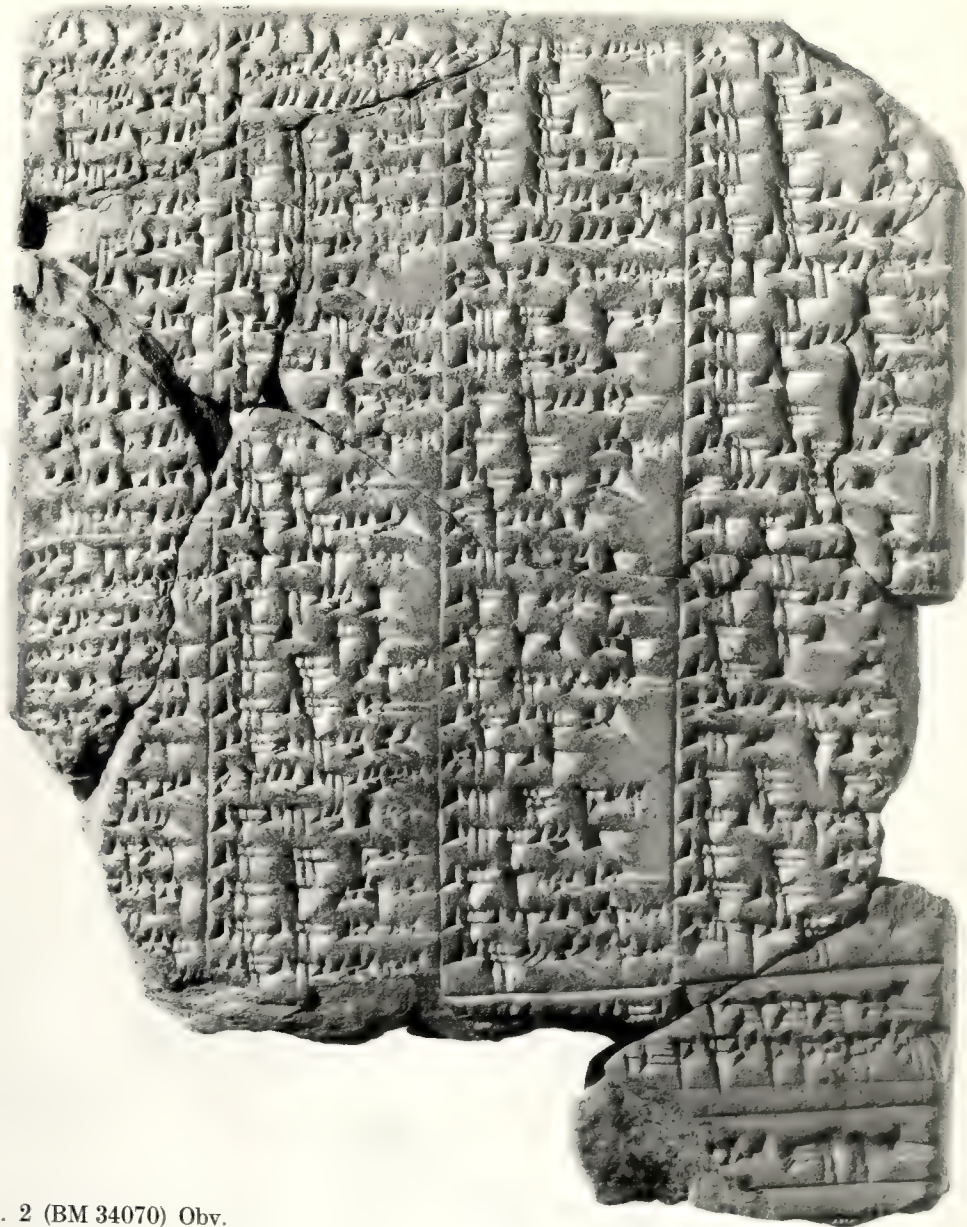
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 ina za-lág genna[...]-māš-māš iḡi
 ina za-lág genna


Face B

(at right angles!)

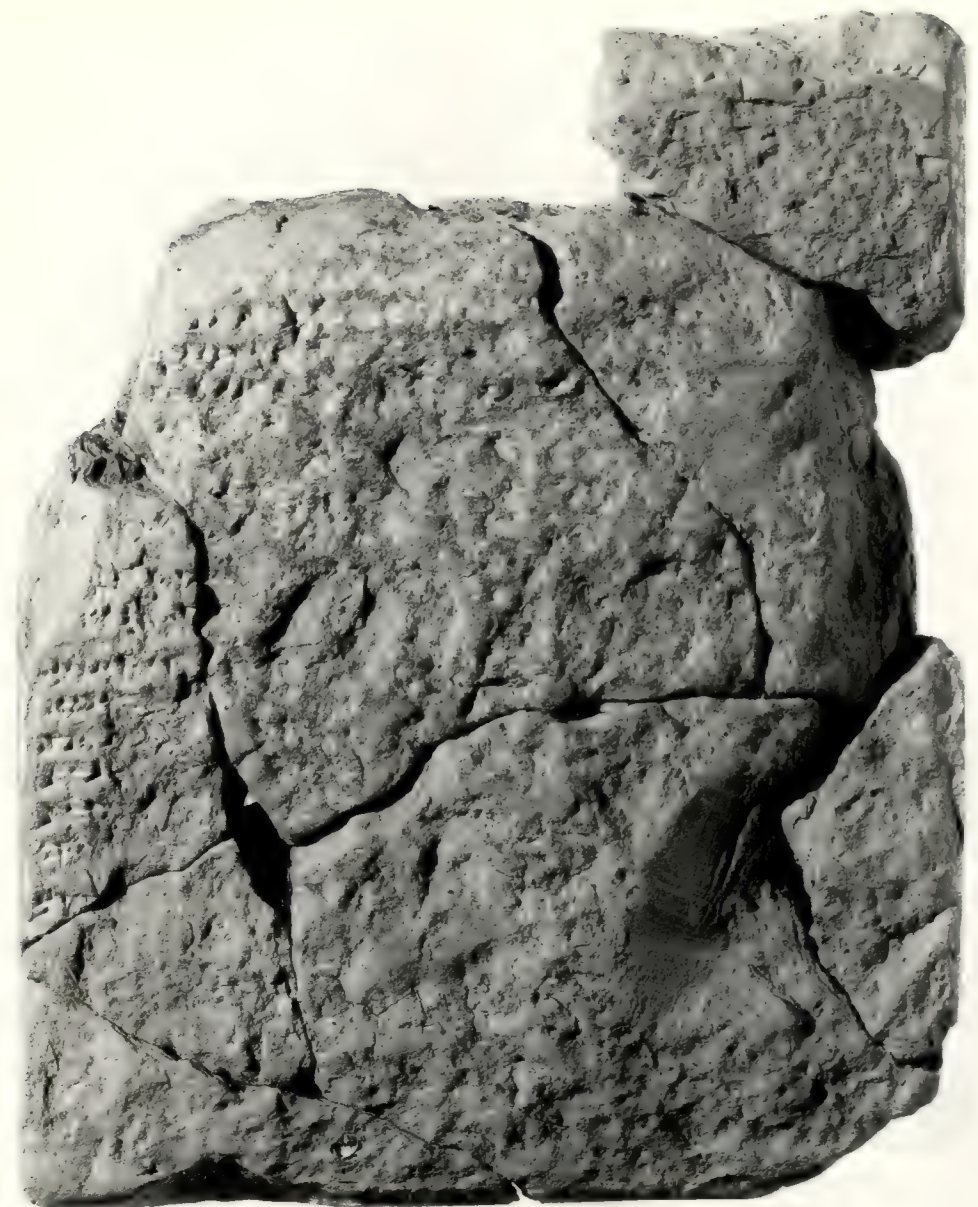
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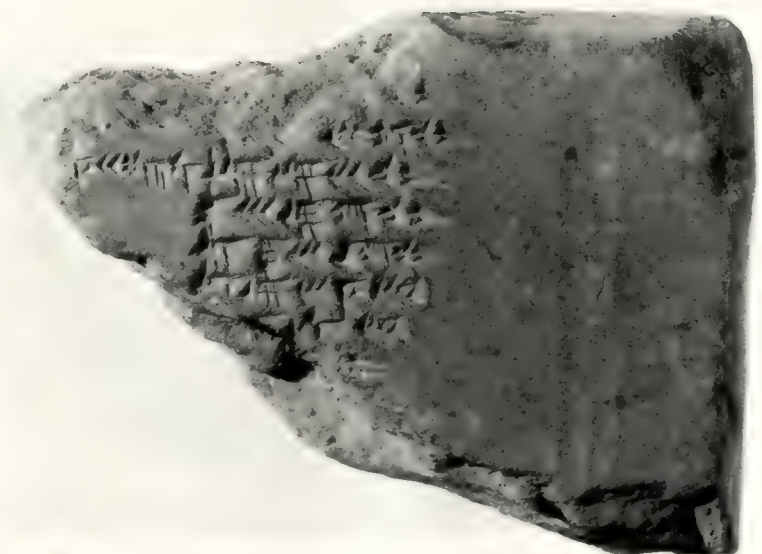
No. 2 (BM 34070) Obv.



No. 3 (BM 32228) Obv.



No. 2 (BM 34070) Rev.



No. 3 (BM 32228) Rev.



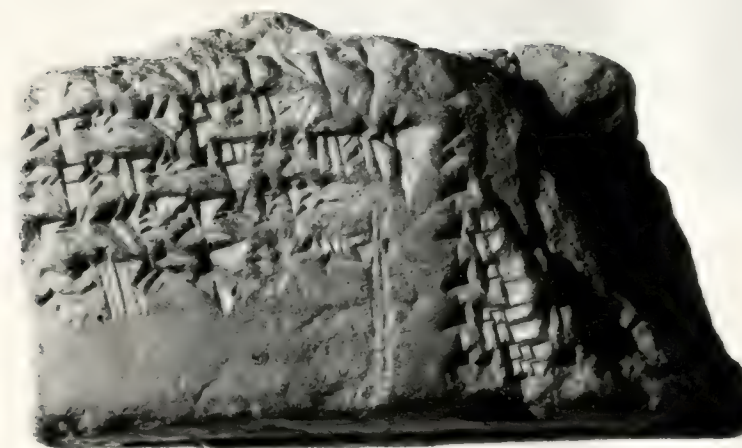
No. 5 (BM 32154+) Obv.



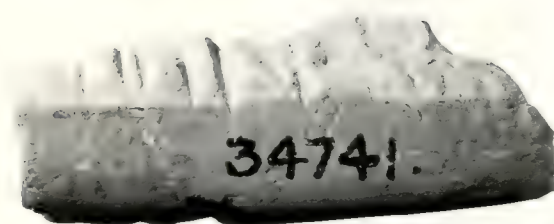
No. 6 (BM 32286) Obv.



No. 5 (BM 32154+) Rev.



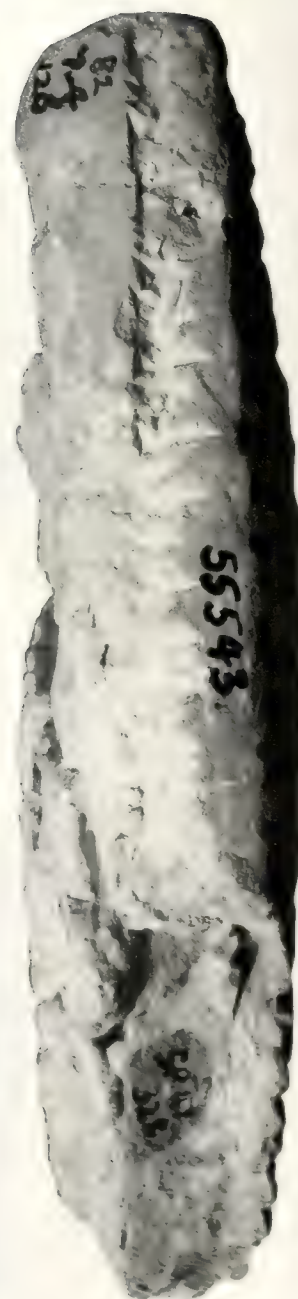
No. 6 (BM 32286) Rev.



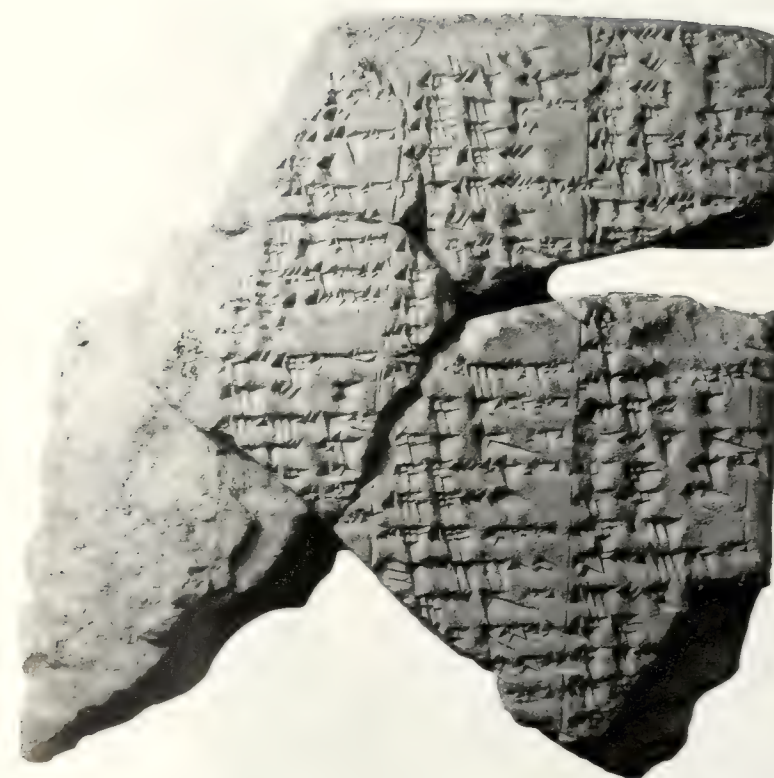
No. 7 (BM 34625+) Upper edge



No. 7 (BM 34625+) Obv.



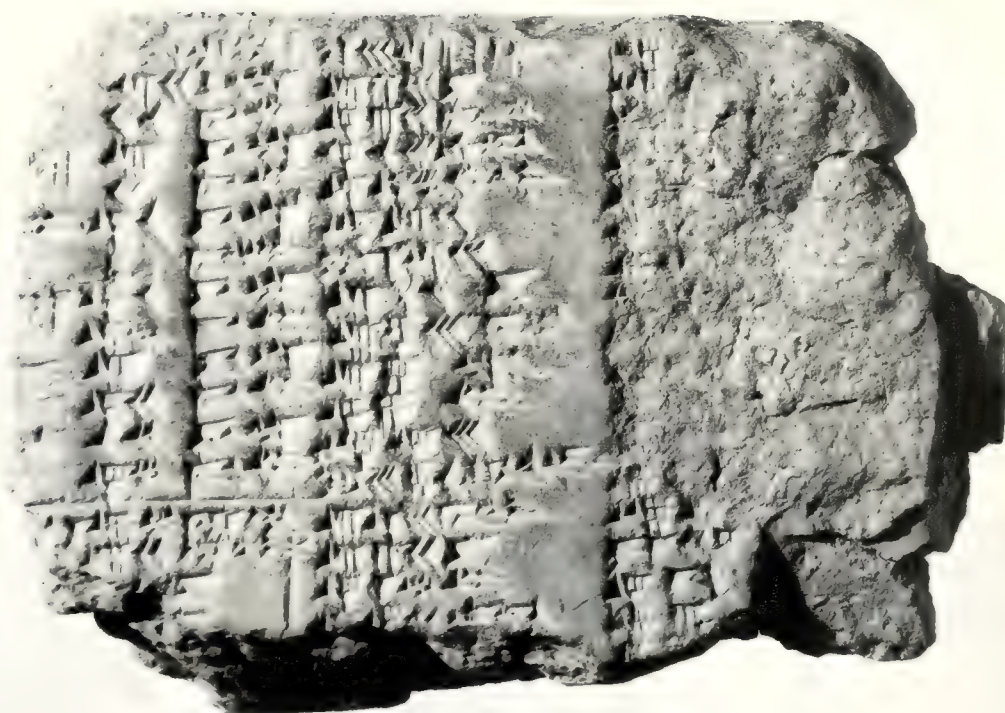
No. 7 (BM 34625+) Left edge



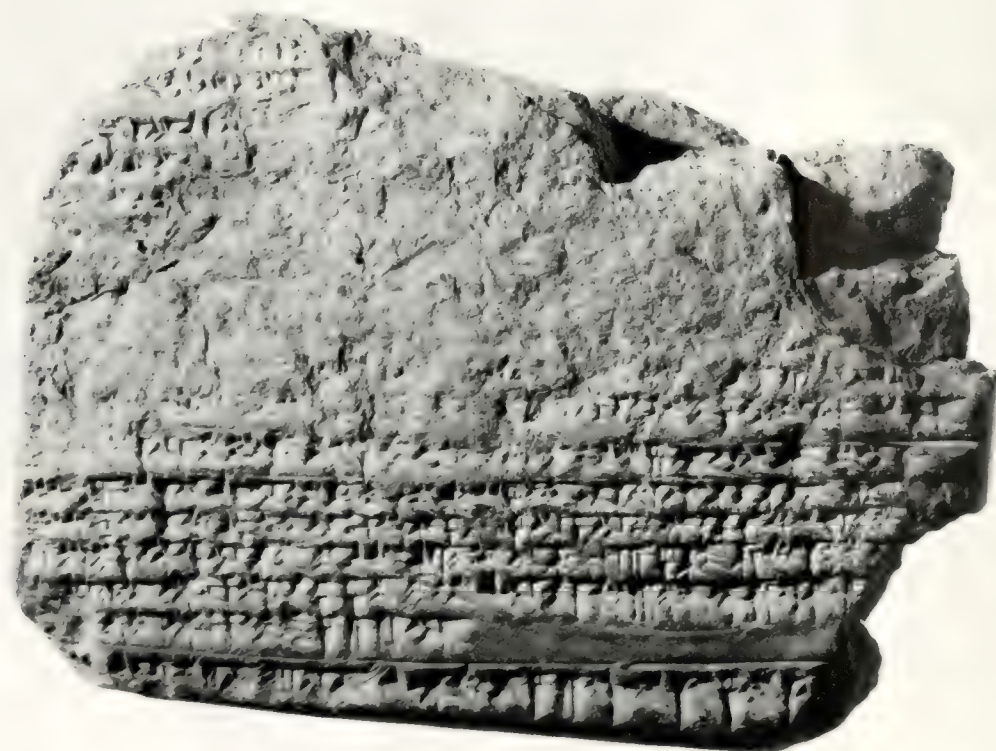
No. 7 (BM 34625+) Rev.



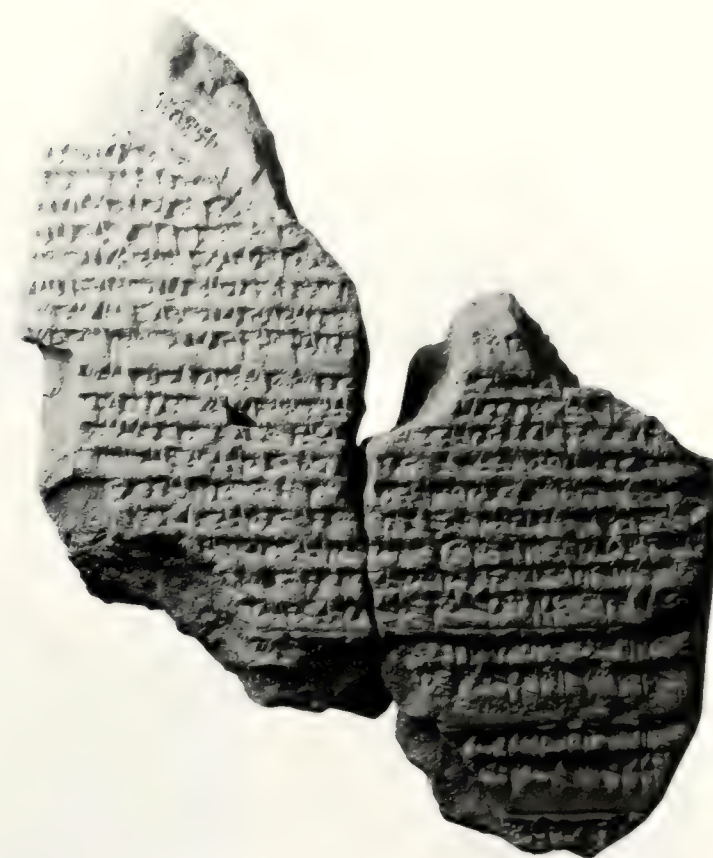
No. 7 (BM 34625+) Right edge



No. 8 (BM 55519) Obv.



No. 8 (BM 55519) Rev.



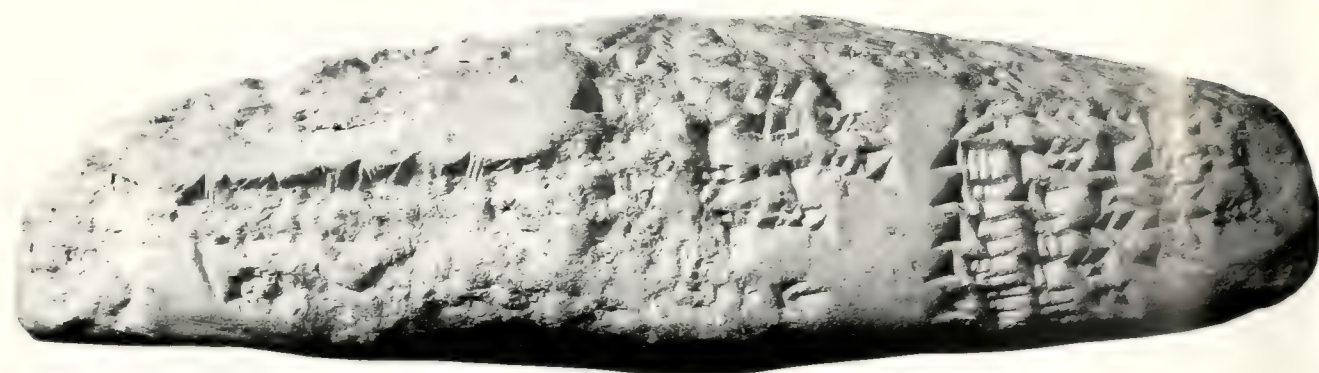
No. 9 (BM 34691 +) Obv.



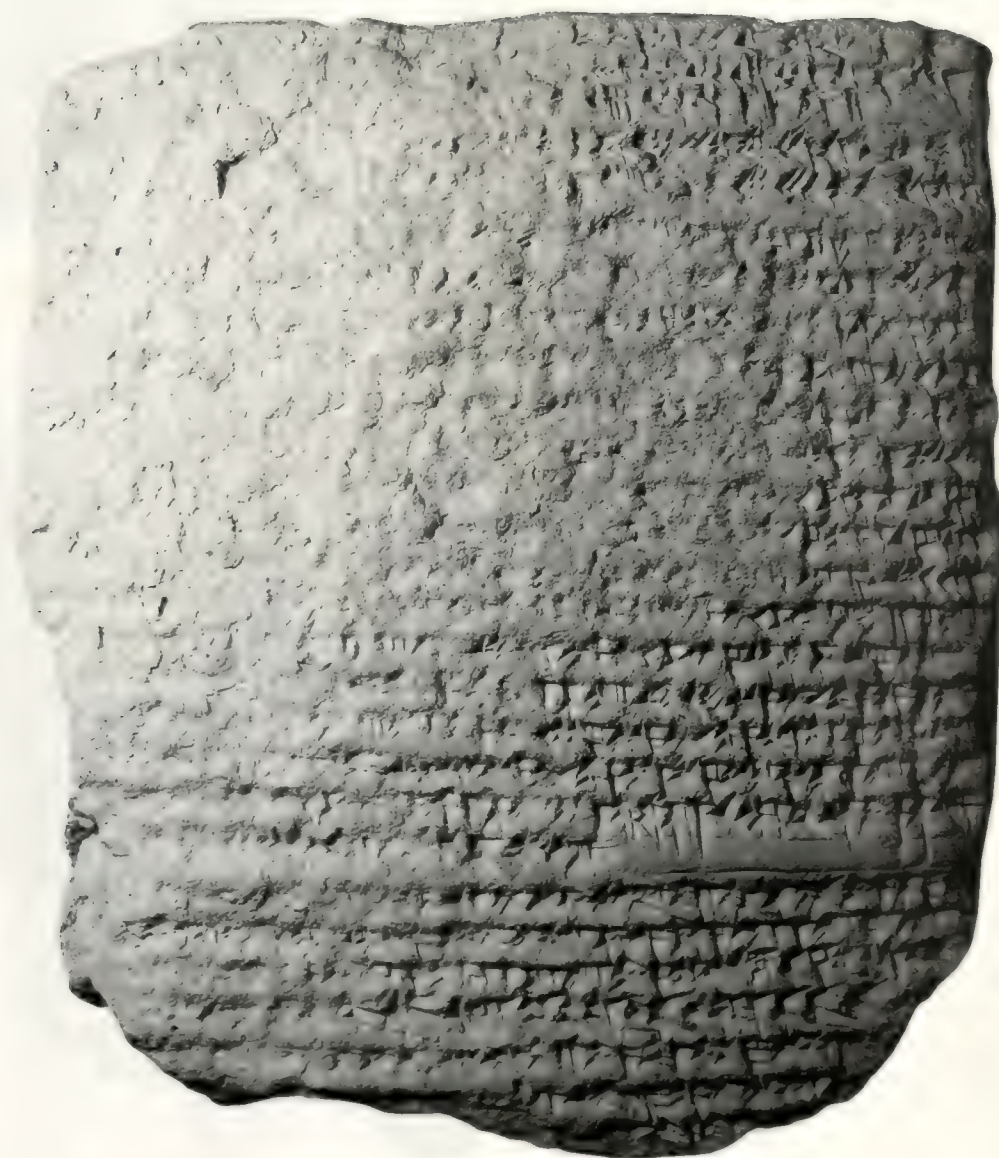
No. 9 (BM 34691 +) Left edge



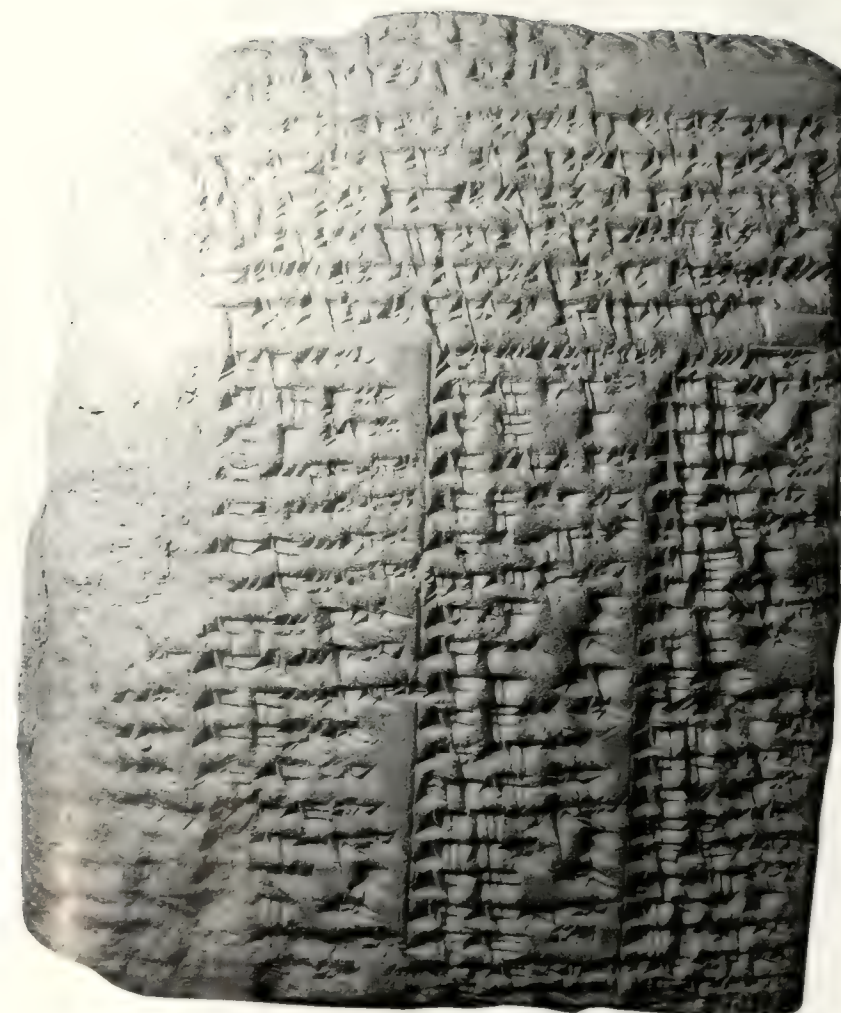
No. 9 (BM 34691 +) Rev.



No. 10 (BM 35388) Upper edge



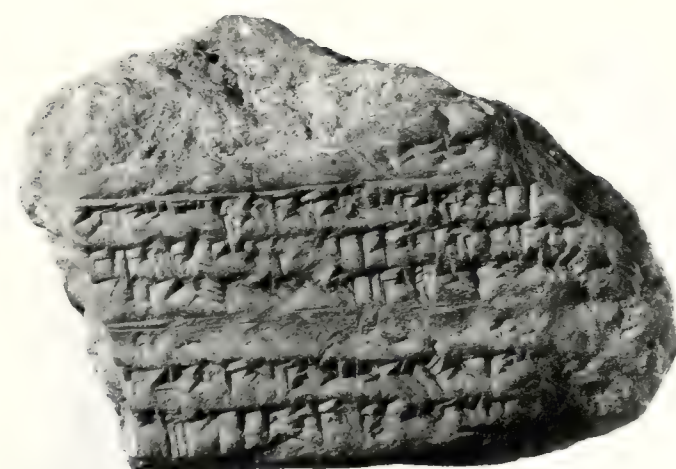
No. 10 (BM 35388) Obv.



No. 10 (BM 35388) Rev.



No. 10 (BM 35388) Right edge



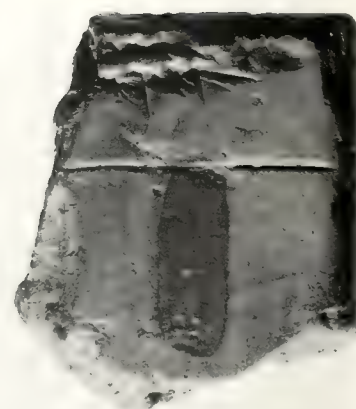
No. 12 (BM 41643) Obv.



No. 11 (BM 36772) Obv.



No. 12 (BM 41643) Rev.



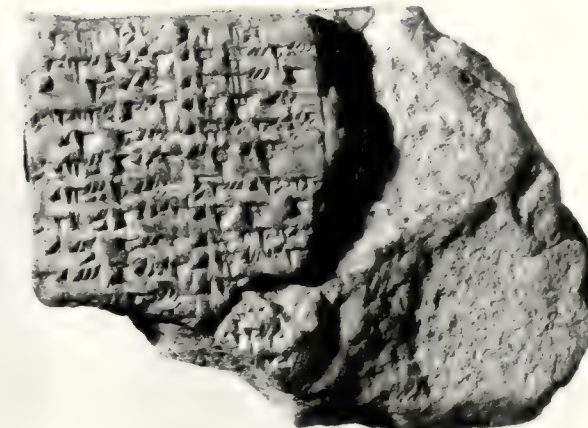
No. 11 (BM 36772) Rev.



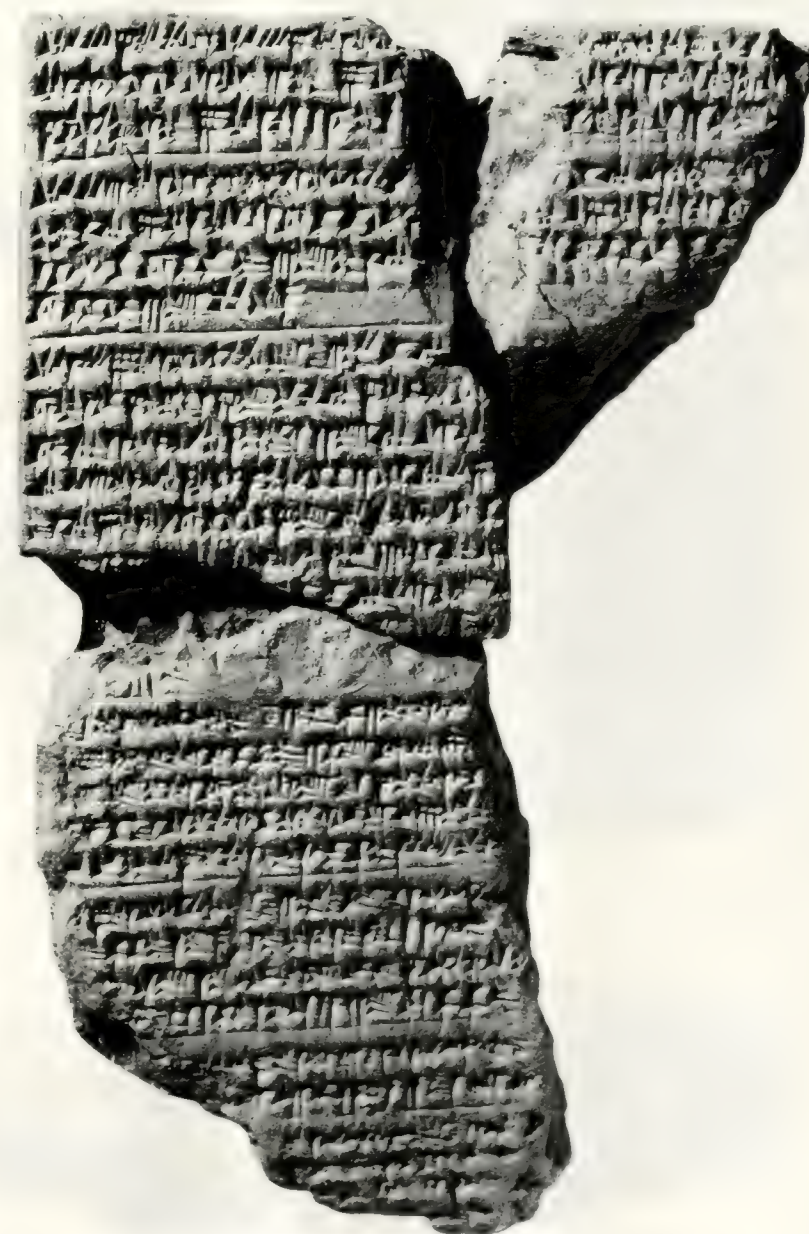
No. 13 (Rm 739)



No. 14 (BM 45787 +) Obv.



No. 14 (BM 45787 +) Rev.



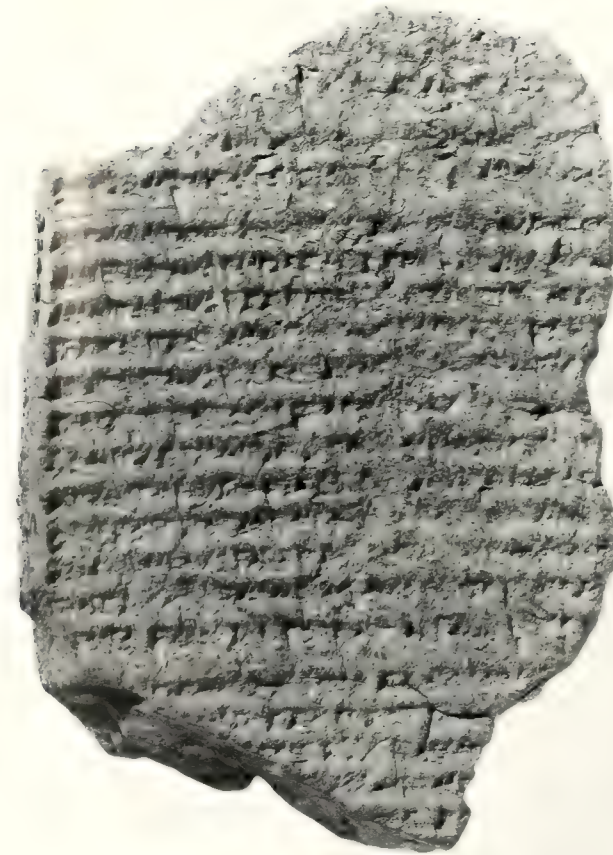
No. 15 (BM 32443 +) Obv.



No. 15 (BM 32443 +) Rev.



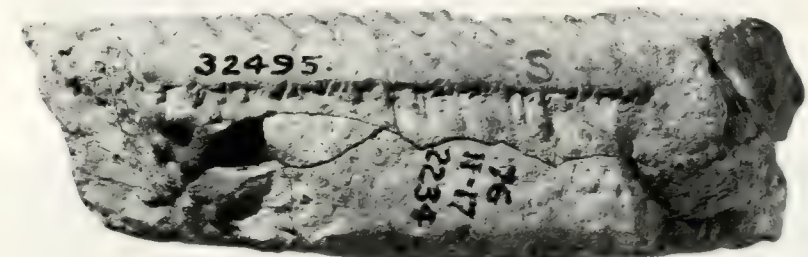
No. 15 (BM 32443 +) Upper edge



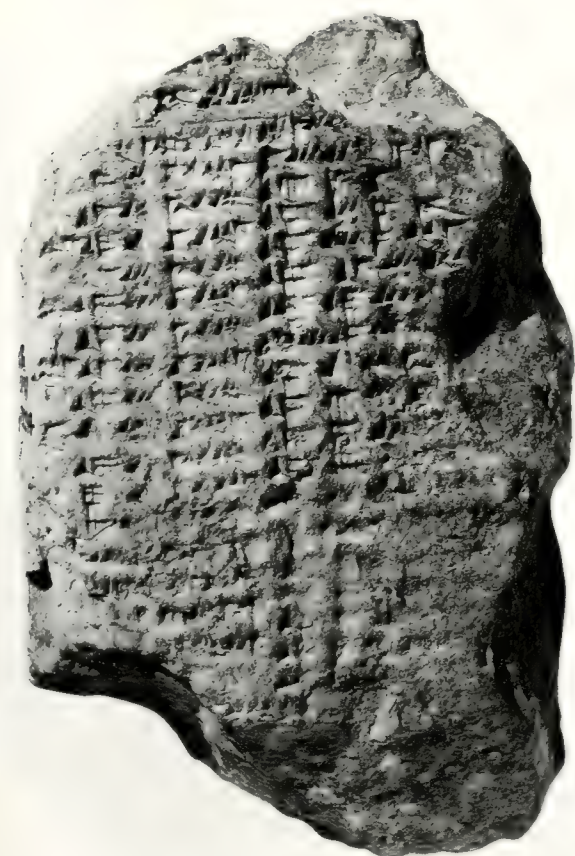
No. 16 (BM 32495) Obv.



No. 16 (BM 32504) Obv.



No. 16 (BM 32495 +) Left edge



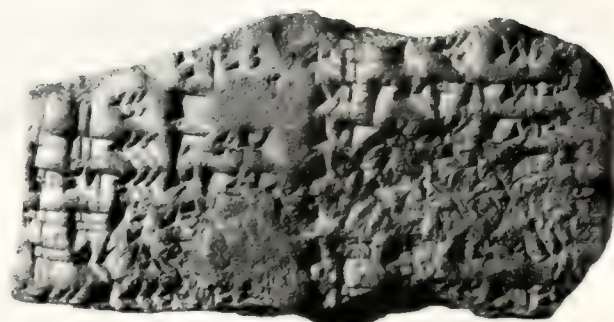
No. 16 (BM 32495) Rev.



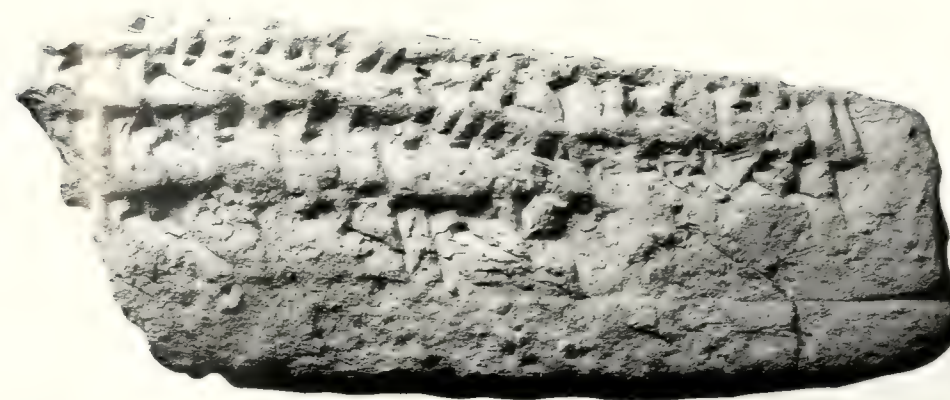
No. 16 (BM 32504) Rev.



No. 17 (BM 35181) Obv.



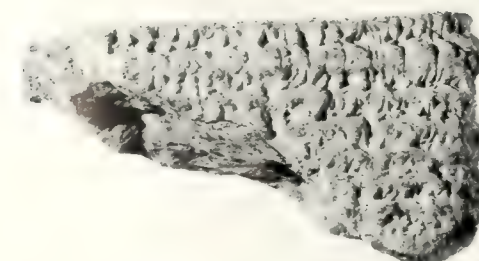
No. 17 (BM 35181) Rev.



No. 18 (BM 41527) Lower edge



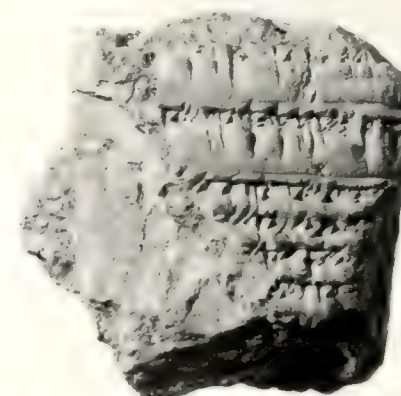
No. 18 (BM 41527) Obv.



No. 18 (BM 41527) Rev.



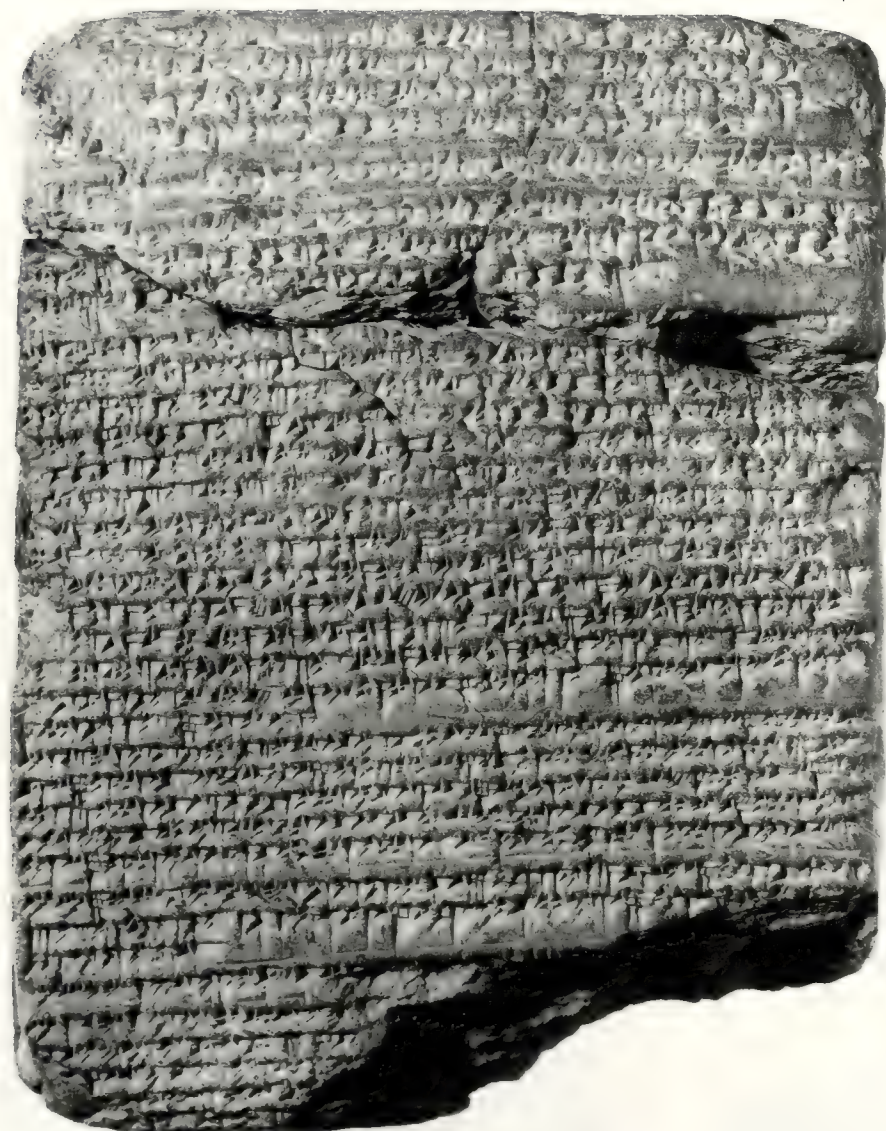
No. 18 (BM 41527) Right edge



No. 21 (BM 32566) Obv.



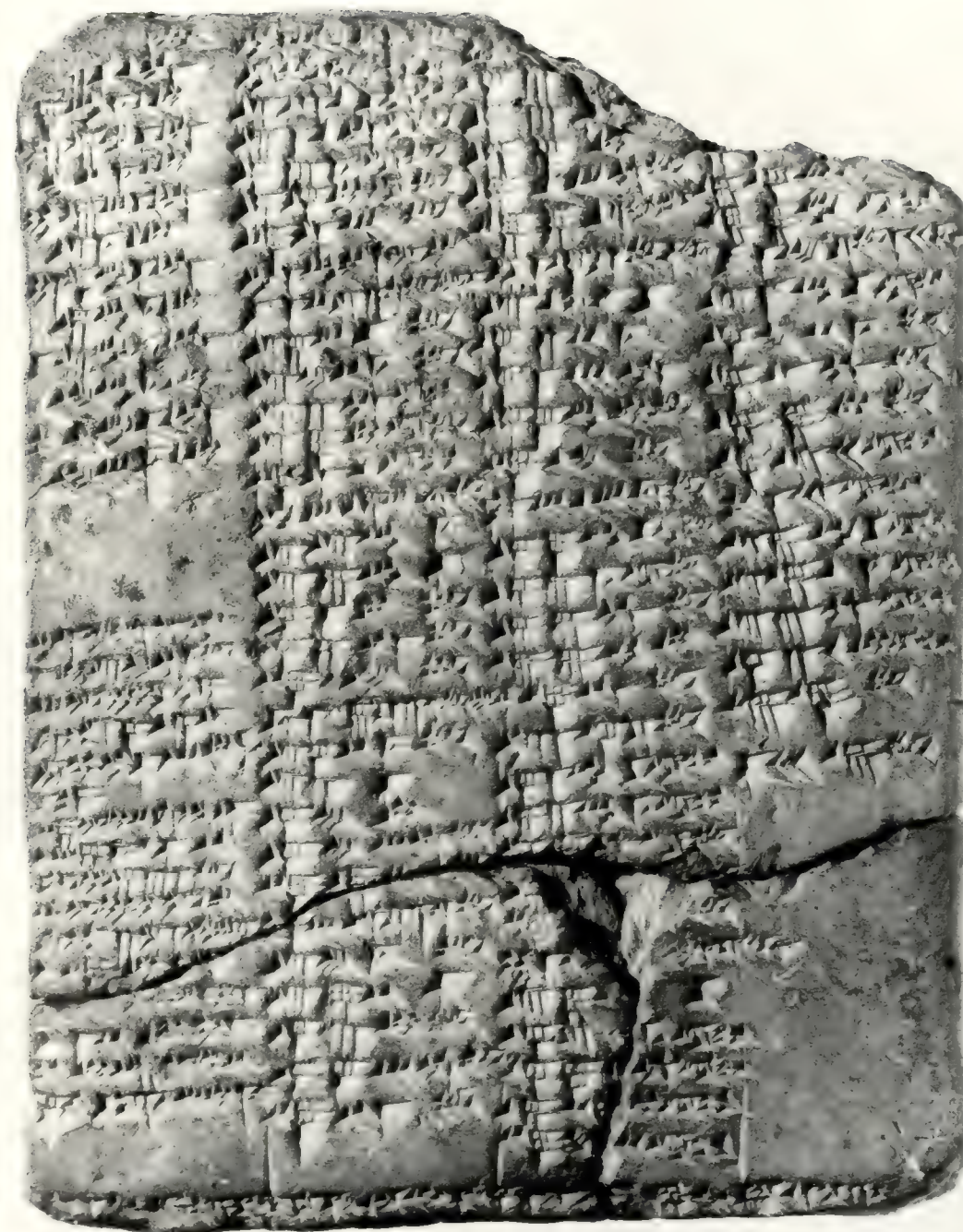
No. 21 (BM 32566) Rev.



No. 20 (BM 32222) Obv.



No. 20 (BM 32222) Right edge

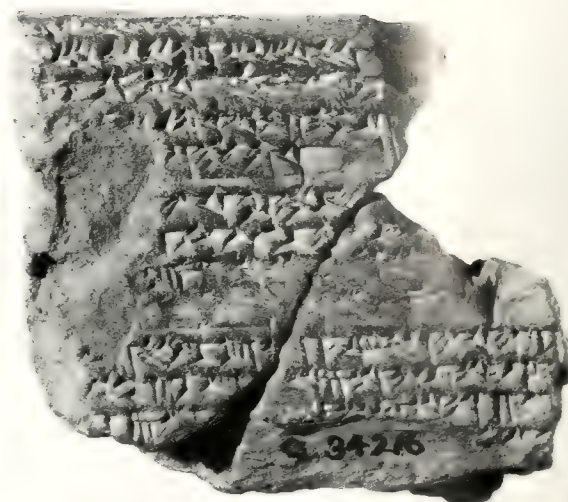


No. 20 (BM 32222) Rev.





No. 22 (BM 34149) Obv.



No. 23 (BM 34216 +) Obv.



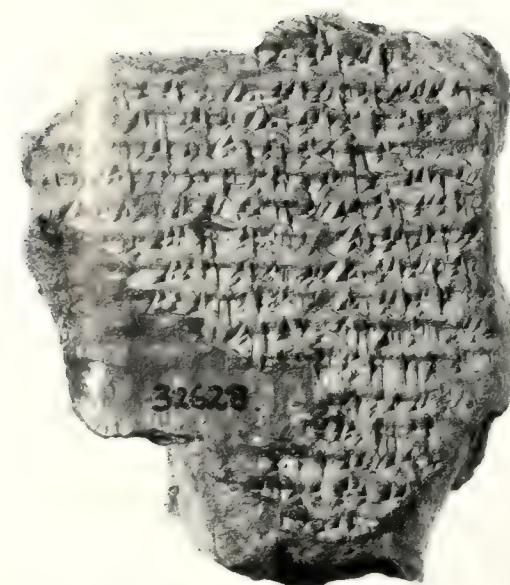
No. 23 (BM 34216 +) Rev.



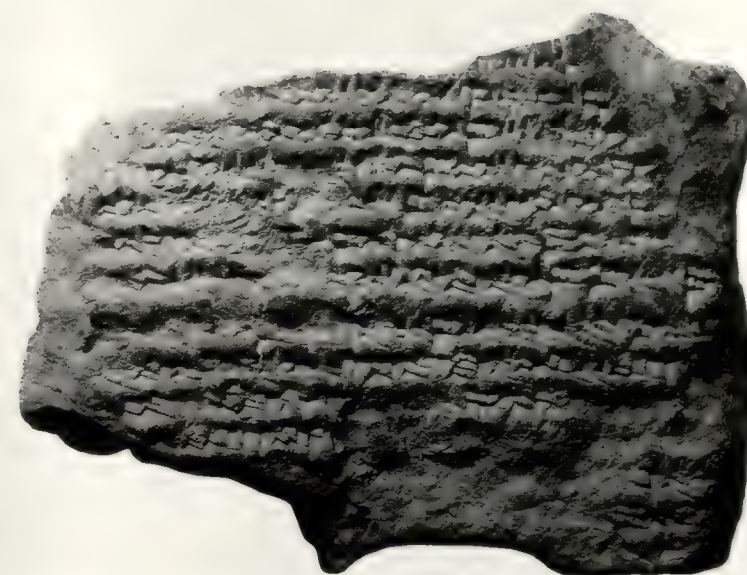
No. 22 (BM 34149) Rev.



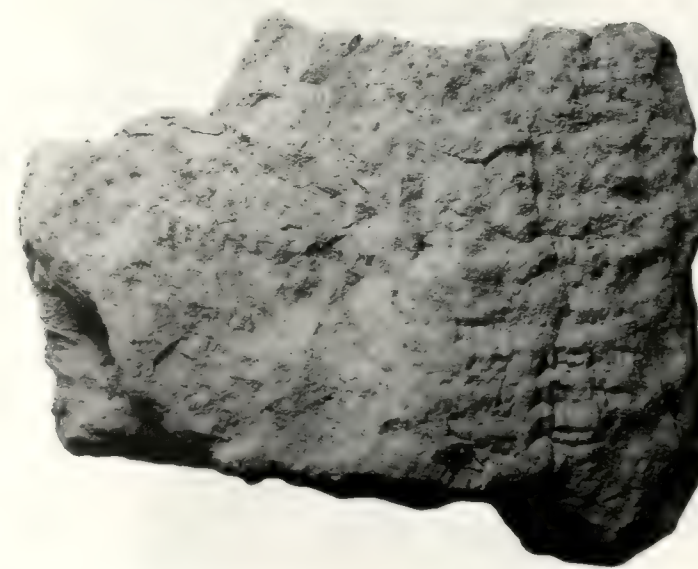
No. 24 (BM 41098)



No. 25 (BM 32628)



No. 26 (BM 34717) Obv.

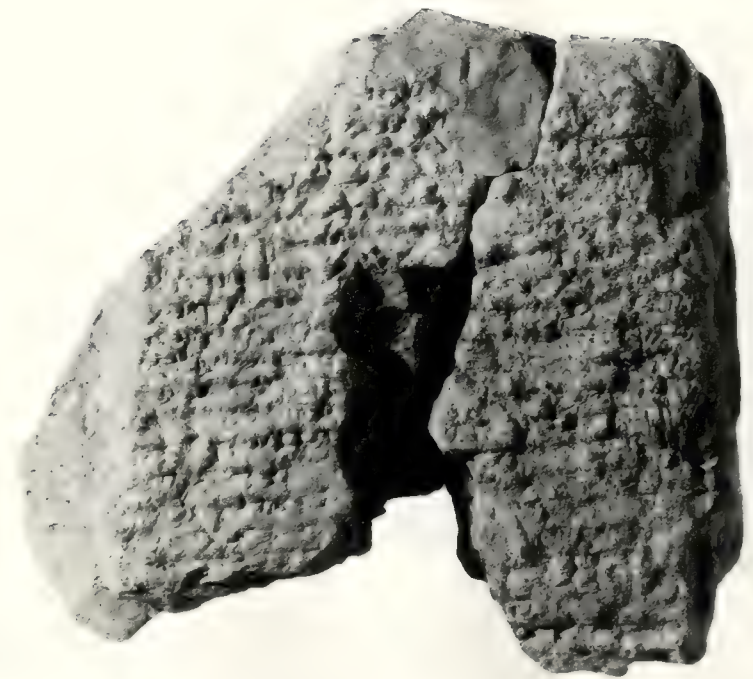


No. 26 (BM 34717) Rev.



No. 27 (BM 45786+) Obv.

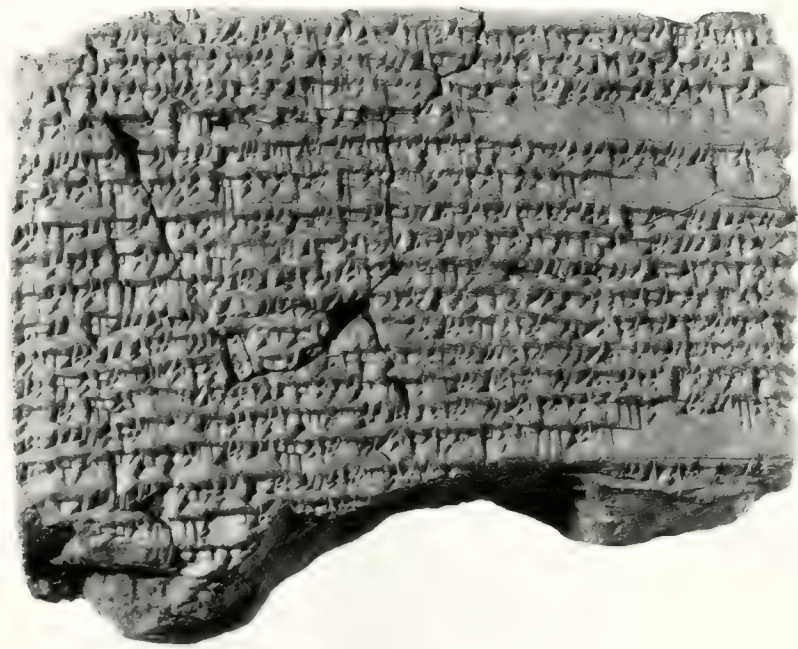
No. 27 (BM 45768+) Rev.



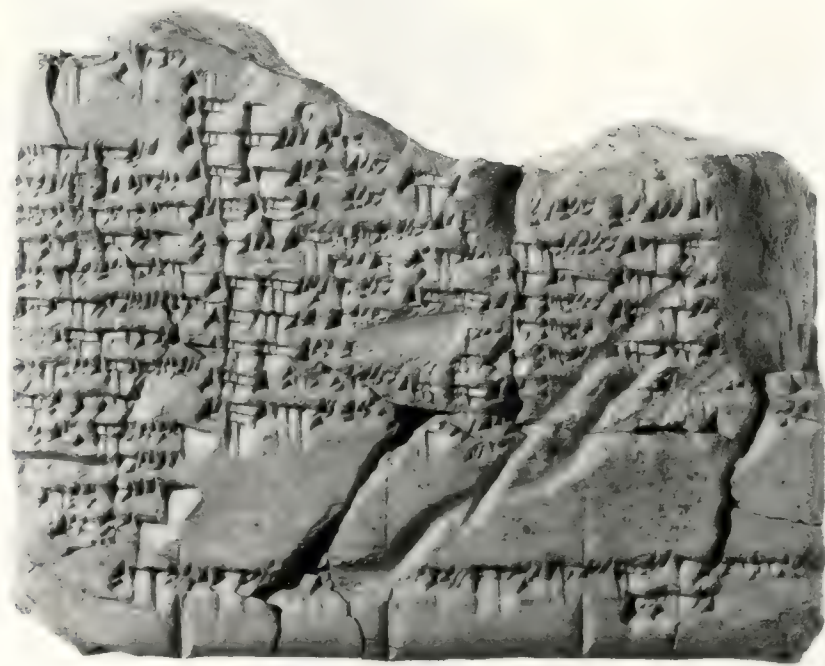
No. 29 (BM 32293) Obv.



No. 29 (BM 32293) Rev.



No. 31 (BM 34048) Obv.



No. 31 (BM 34048) Rev.



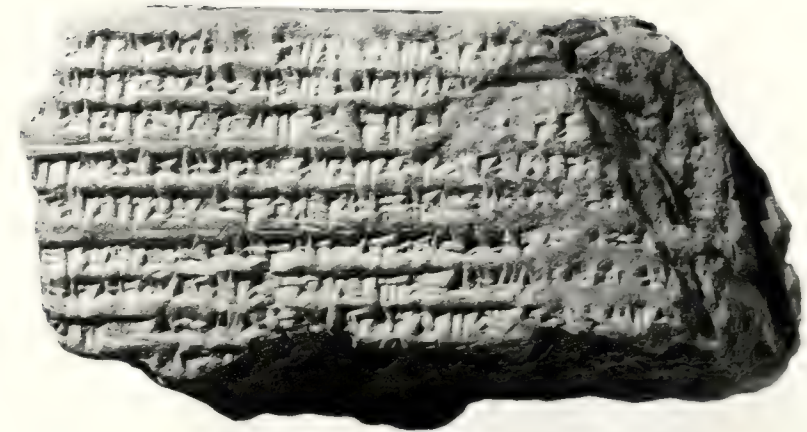
No. 30 (BM 35221)



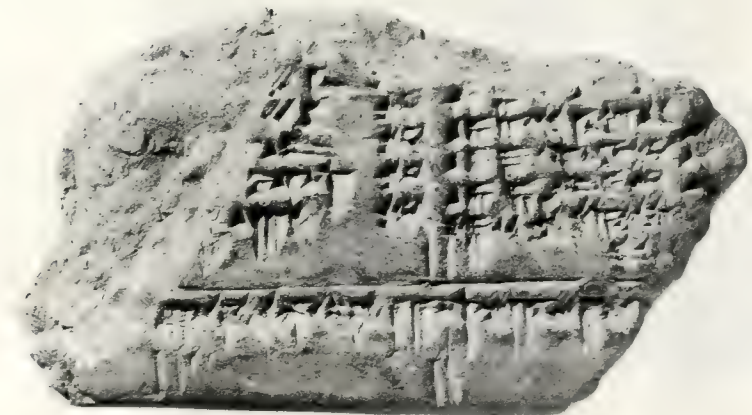
No. 33 (BM 32986) Obv.



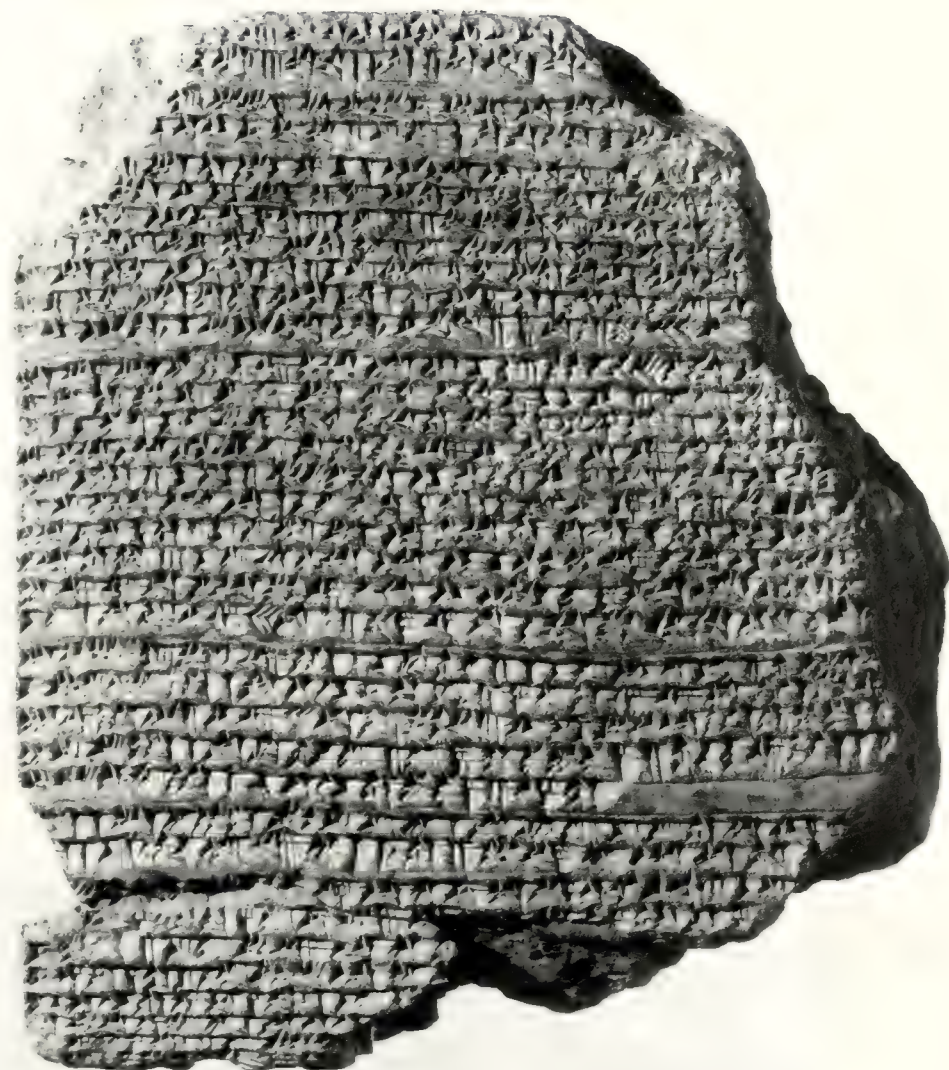
No. 33 (BM 32986) Rev.



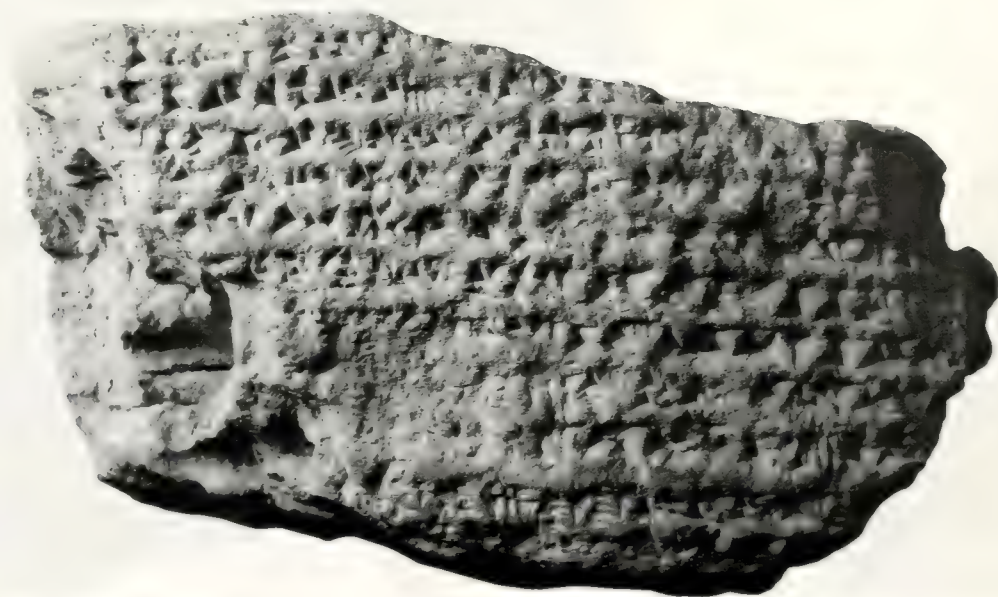
No. 32 (BM 55560) Obv.



No. 32 (BM 55560) Rev.



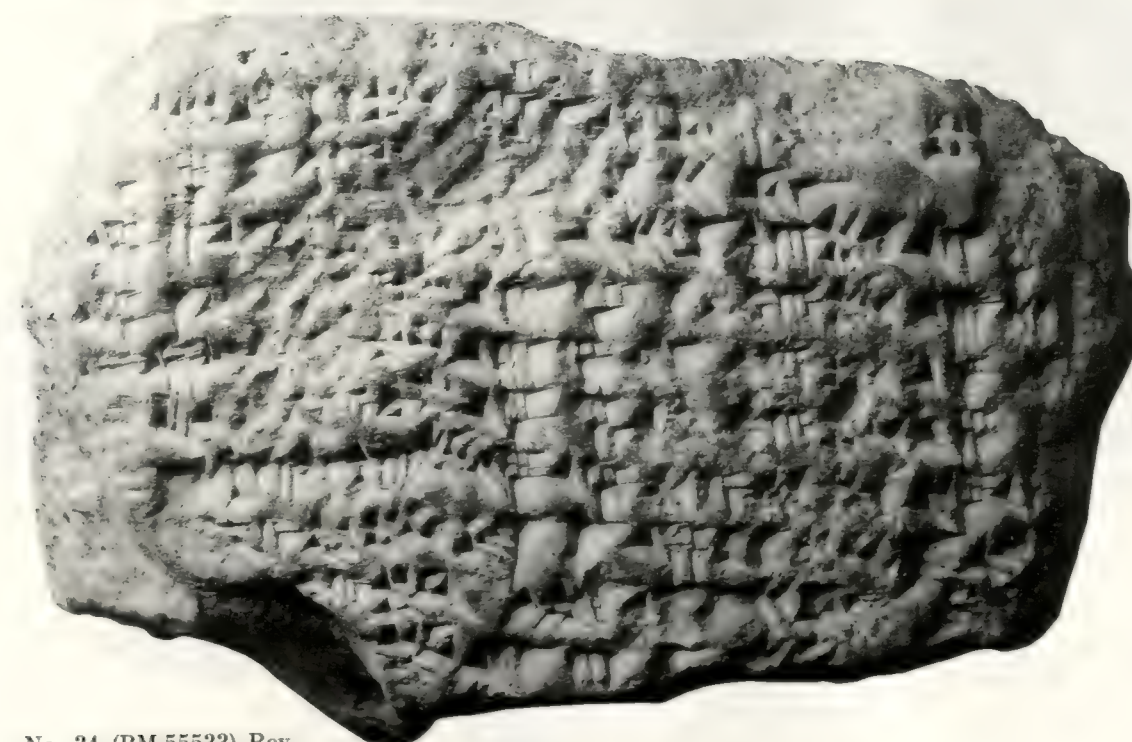
No. 35 (BM 34579+) Obv.



No. 34 (BM 55533) Obv.



No. 35 (BM 34579+) Rev.



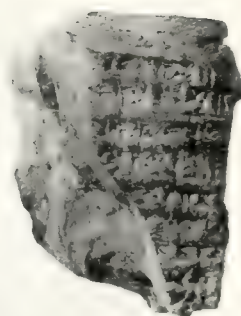
No. 34 (BM 55533) Rev.



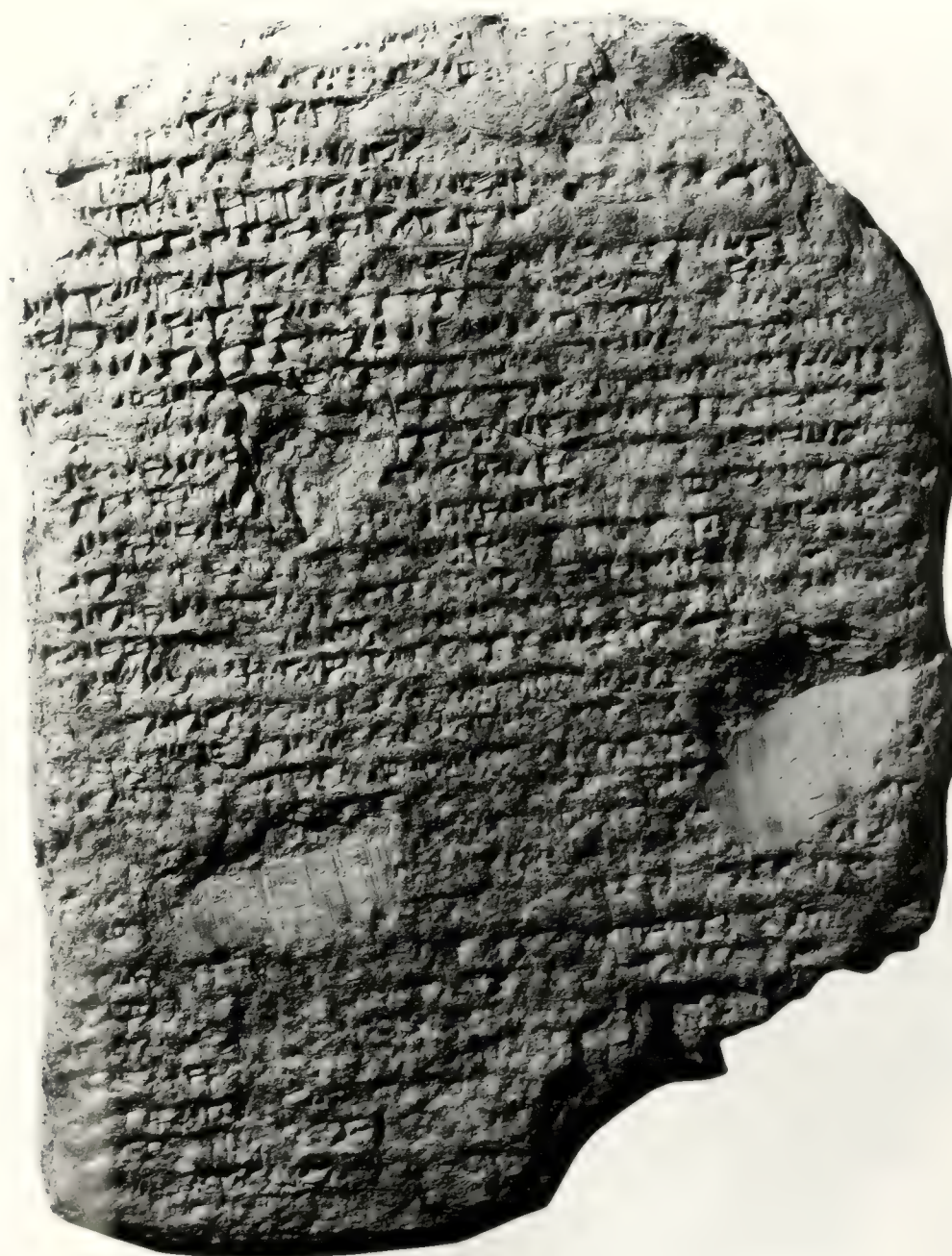
No. 37 (BM 55515+) Obv.



No. 37 (BM 55515+) Rev.



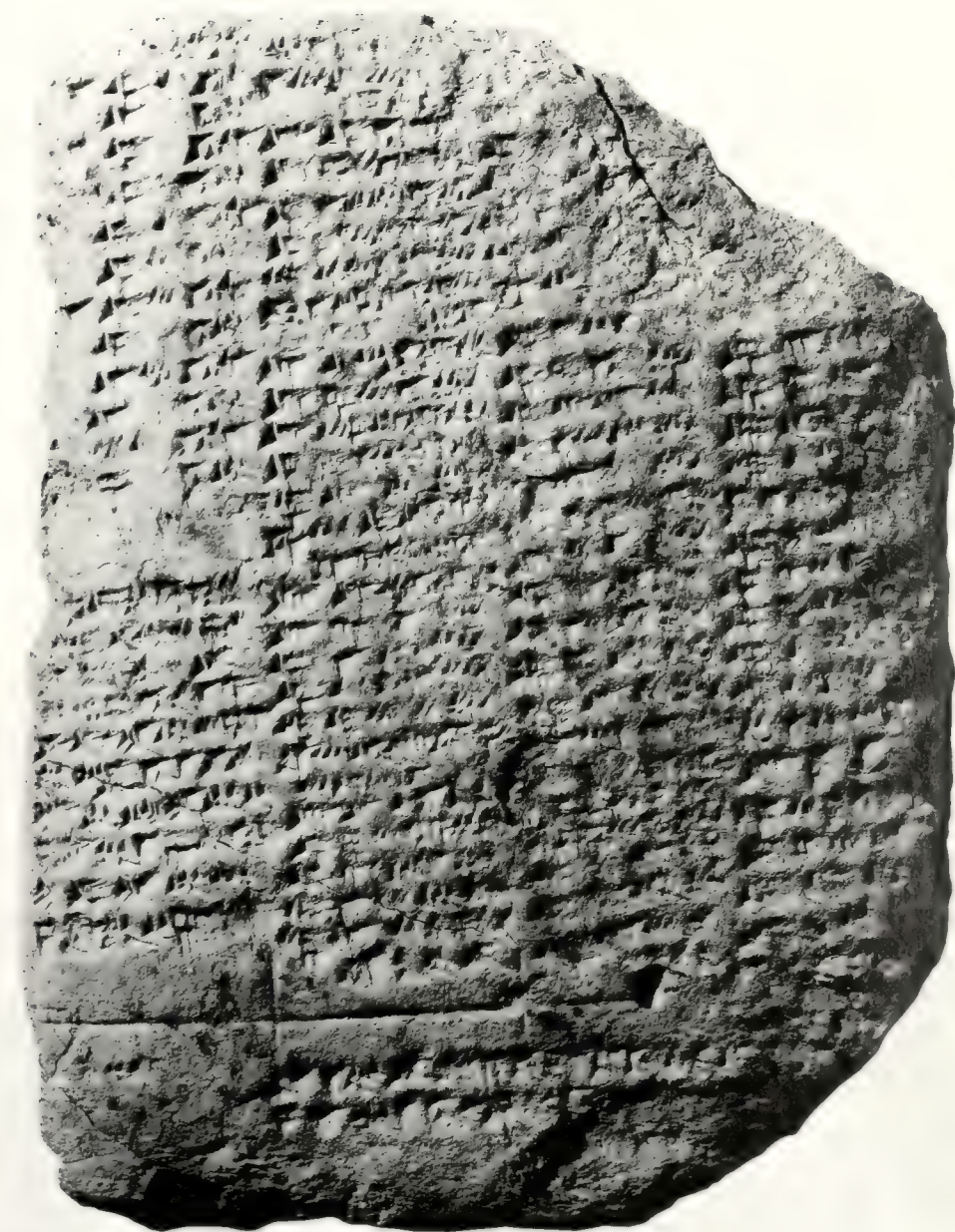
No. 38 (BM 41072)



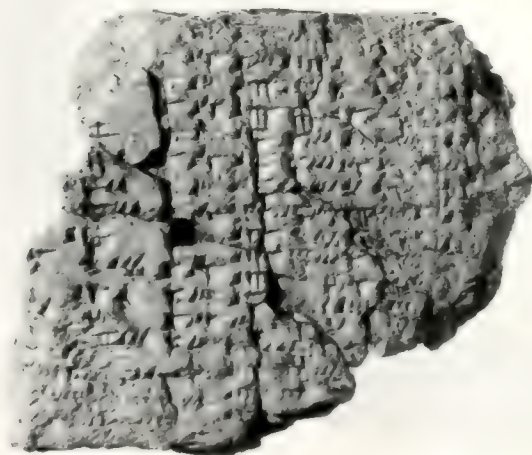
No. 39 (BM 33823) Obv.



No. 39 (BM 33823) Lower edge



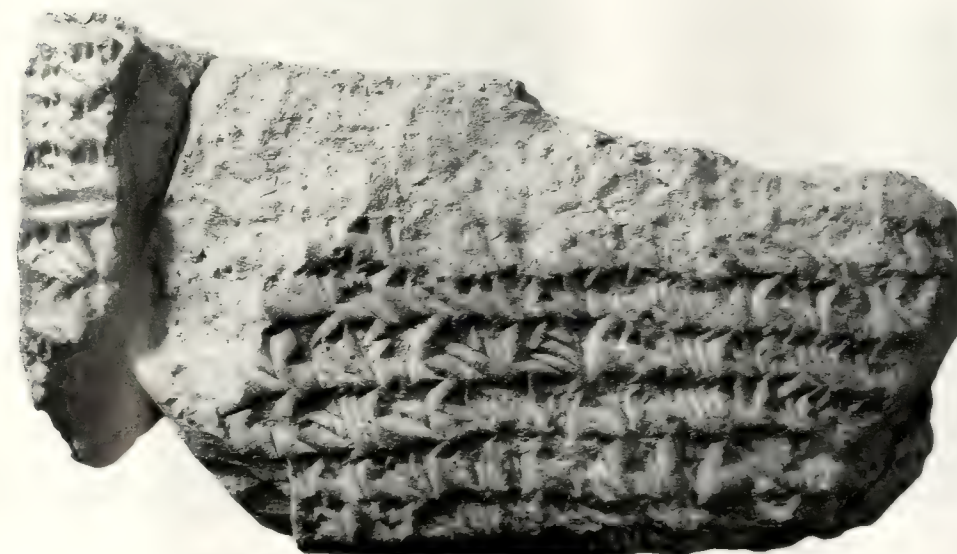
No. 39 (BM 33823) Rev.



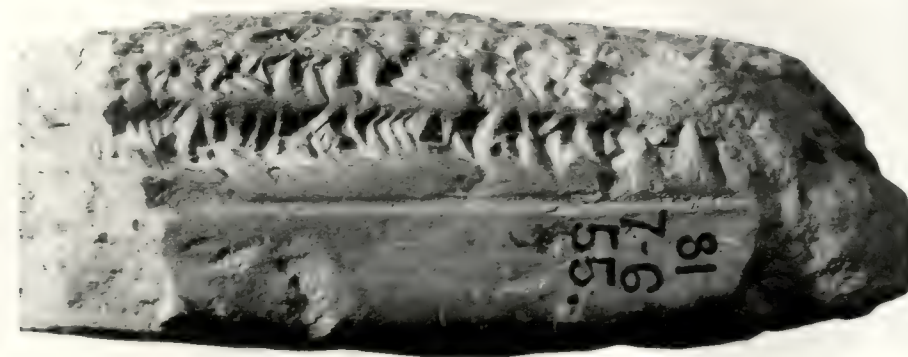
No. 40 (BM 34163) Rev.



No. 41 (BM 45661 +) Obv.



No. 41 (BM 45661 +) Rev.



No. 41 (BM 45661 +) Upper edge



No. 45 (BM 34932) Obv.



No. 45 (BM 40866 +) Obv.



No. 42 (BM 35587)



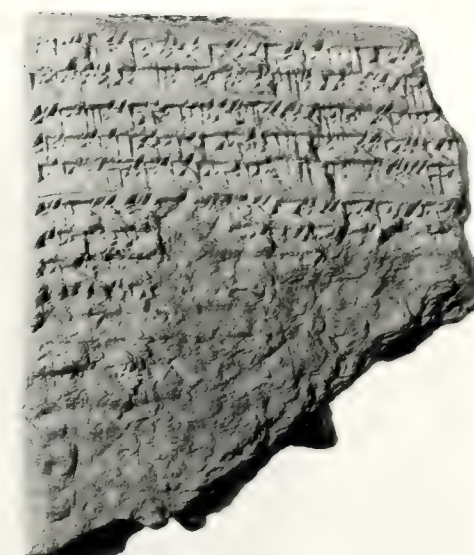
No. 45 (BM 132286) Obv.



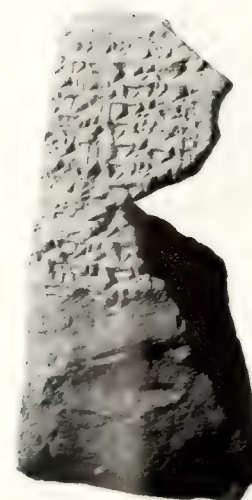
No. 43 (BM 34498)



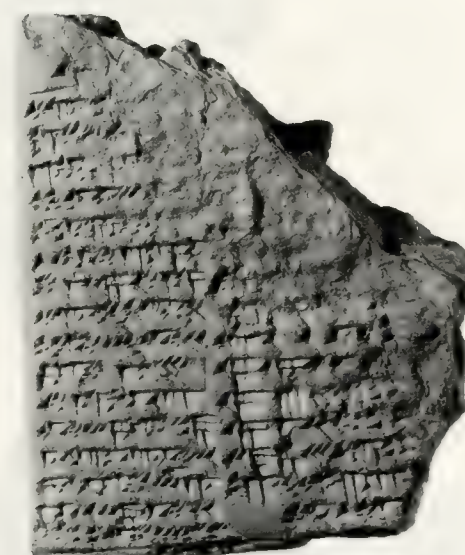
No. 45 (BM 132286) Rev.



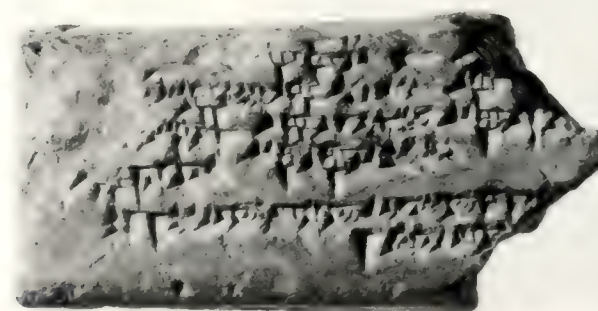
No. 47 (BM 34037) Obv.



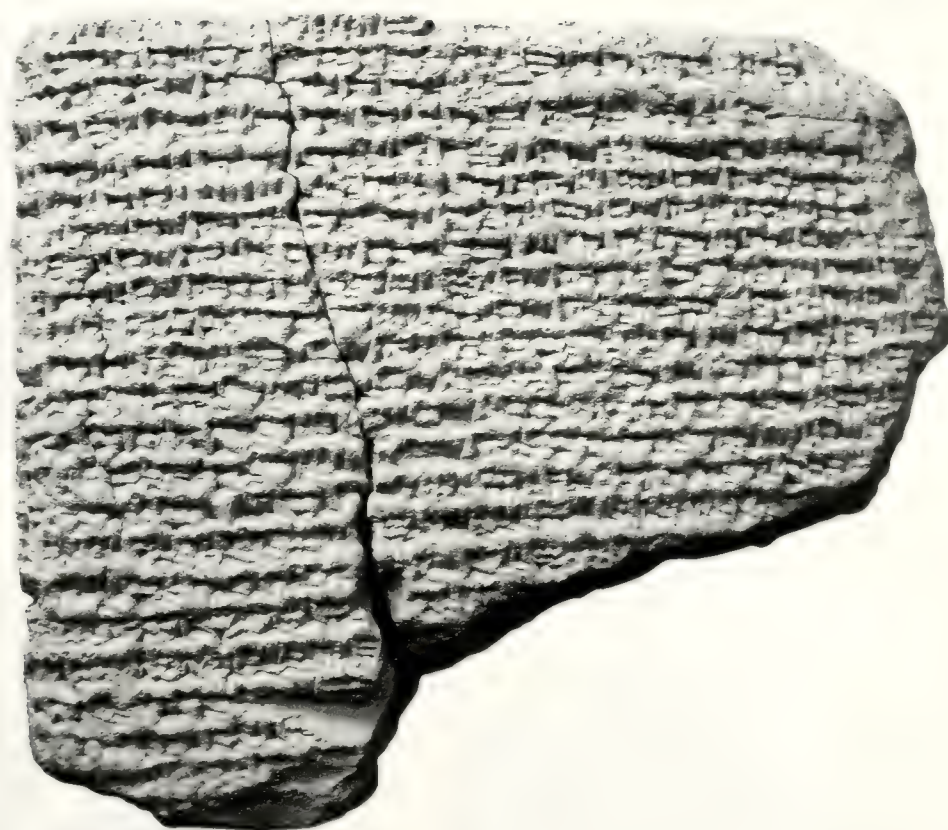
No. 45 (BM 40866 +) Rev.



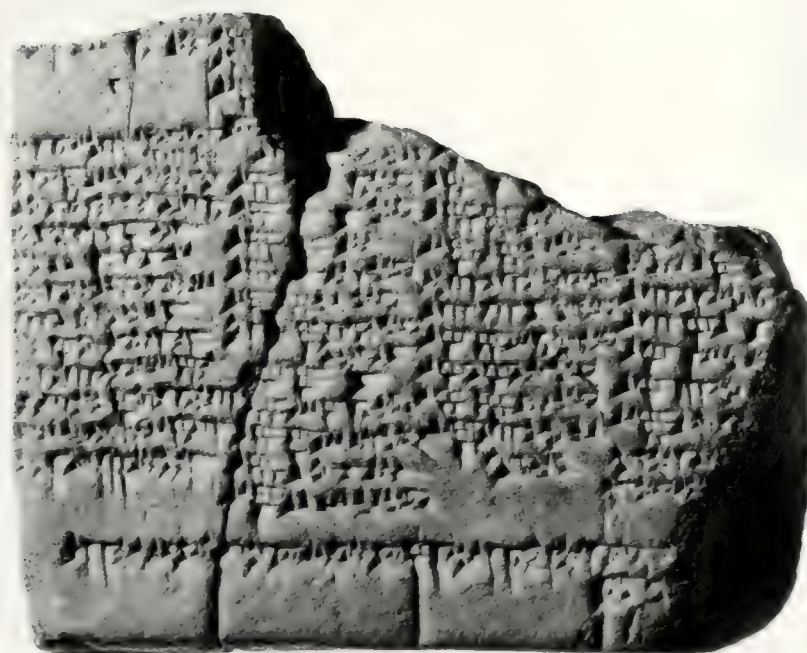
No. 47 (BM 34037) Rev.



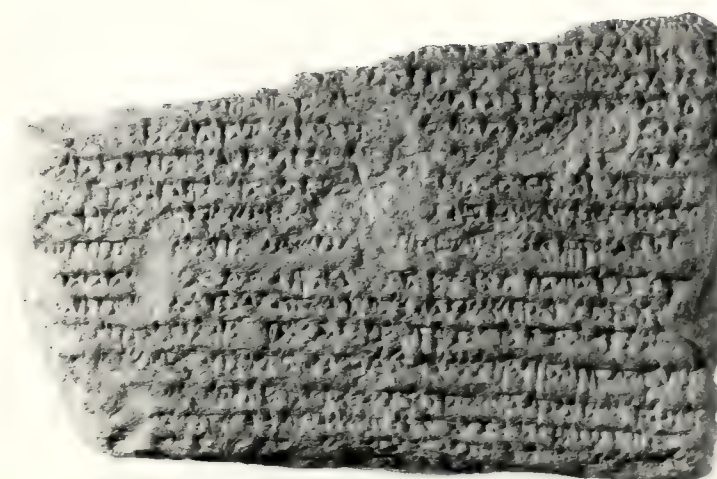
No. 45 (BM 34932) Rev.



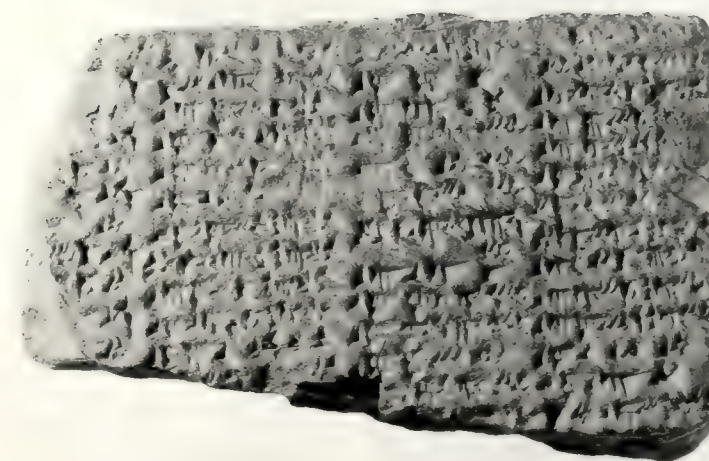
No. 46 (BM 34603) Obv.



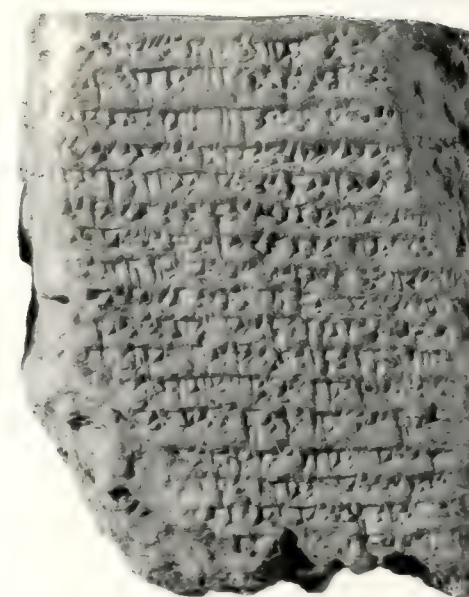
No. 46 (BM 34603) Rev.



No. 48 (BM 34044) Obv.



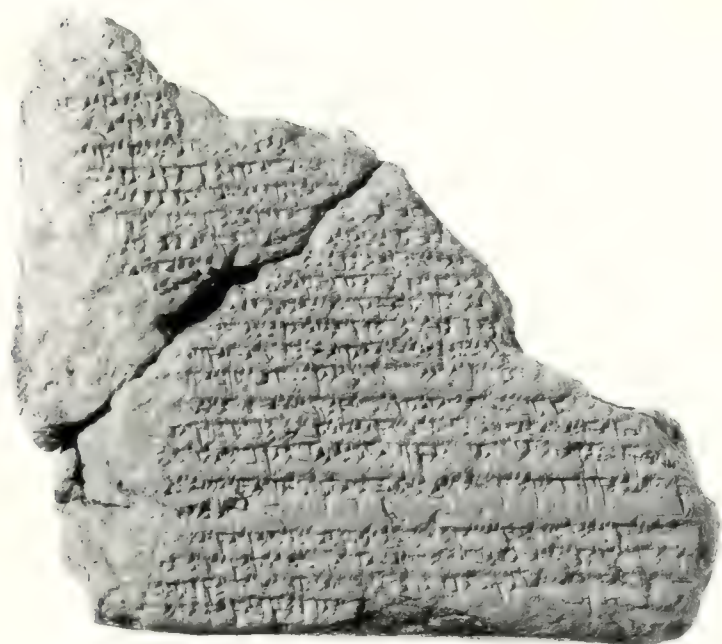
No. 48 (BM 34044) Rev.



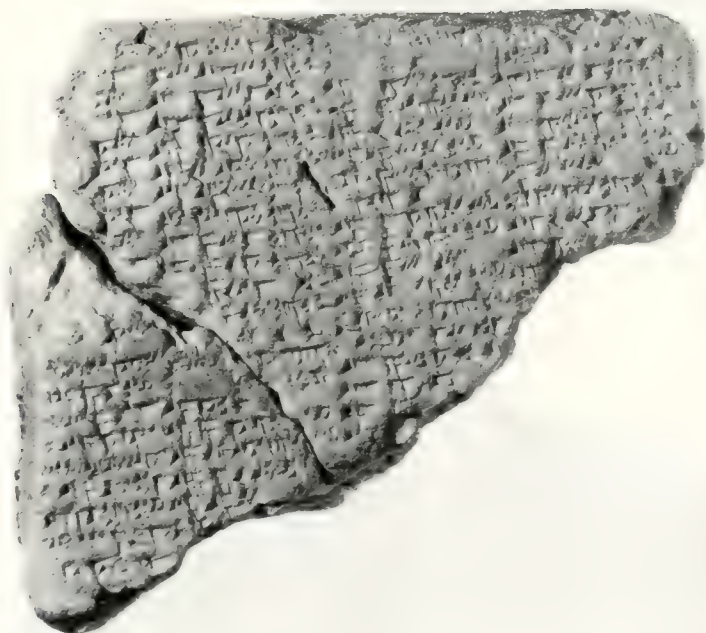
No. 49 (BM 34595) Obv.



No. 49 (BM 34595) Rev.



No. 50 (BM 34615) Obv.



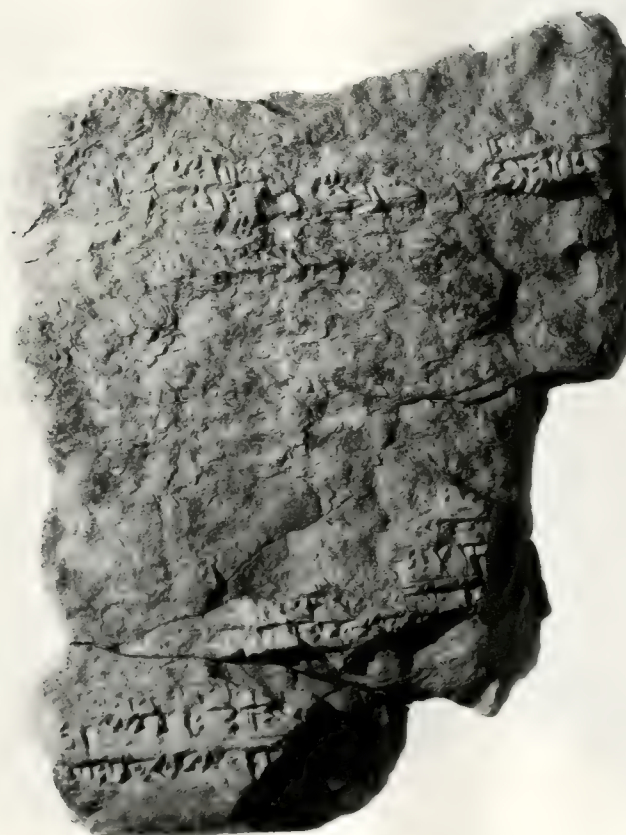
No. 50 (BM 34615) Rev.



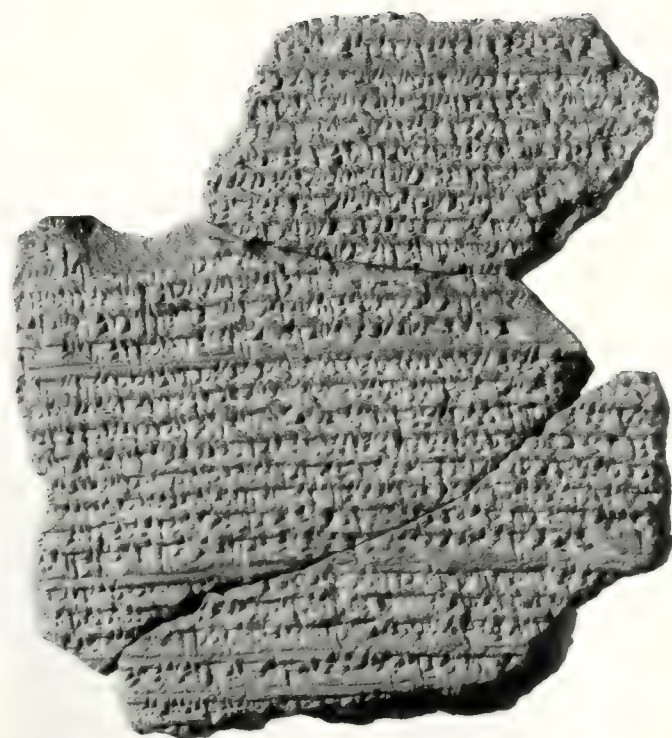
No. 51 (BM 45794+)



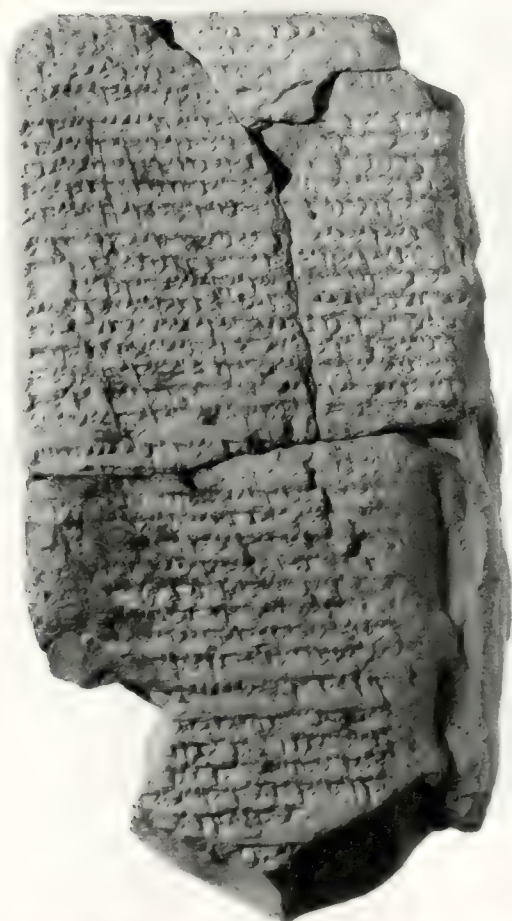
No. 52 (BM 34145) Obv.



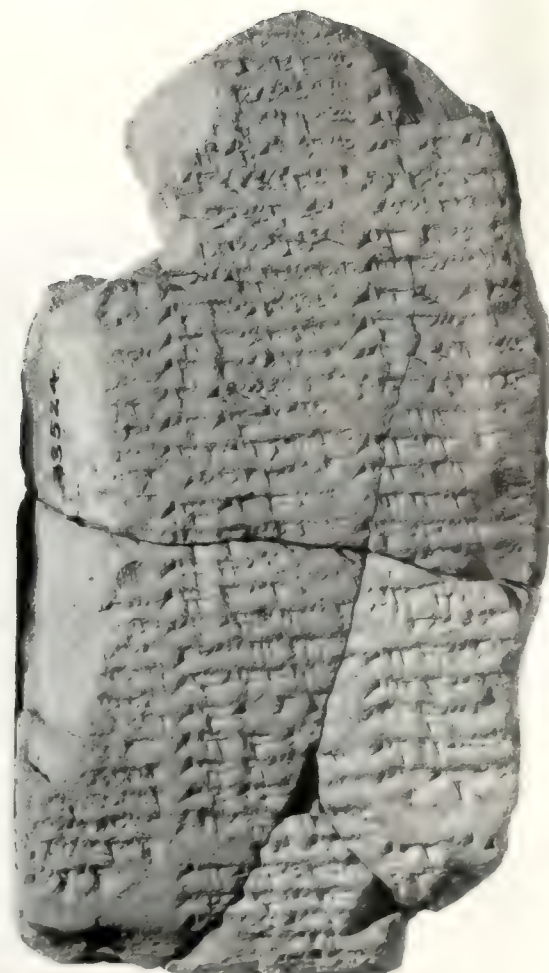
No. 52 (BM 34145) Rev.



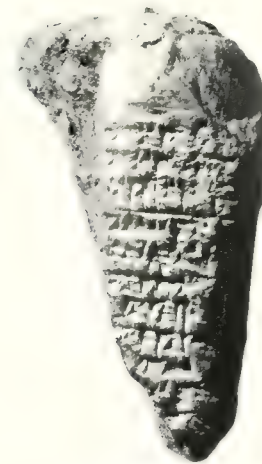
No. 53 (BM 34968 +)



No. 54 (BM 33472) Obv.



No. 54 (BM 33472) Rev.



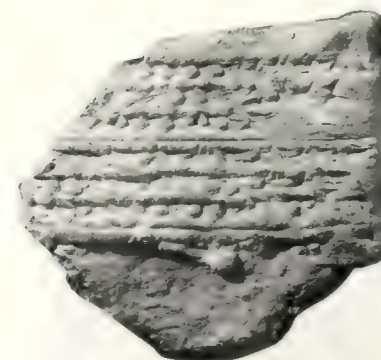
No. 55 (BM 45881) Obv.



No. 55 (BM 45881) Right edge



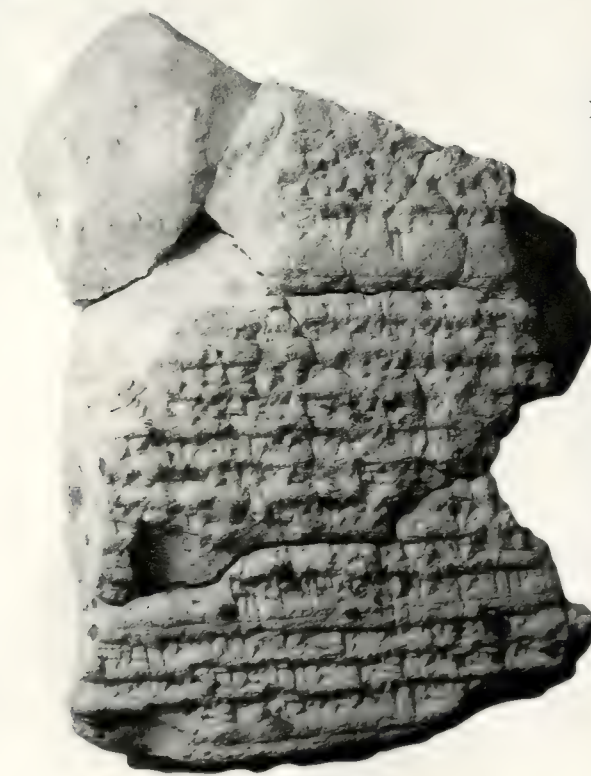
No. 55 (BM 45881) Rev.



No. 56 (BM 47928)



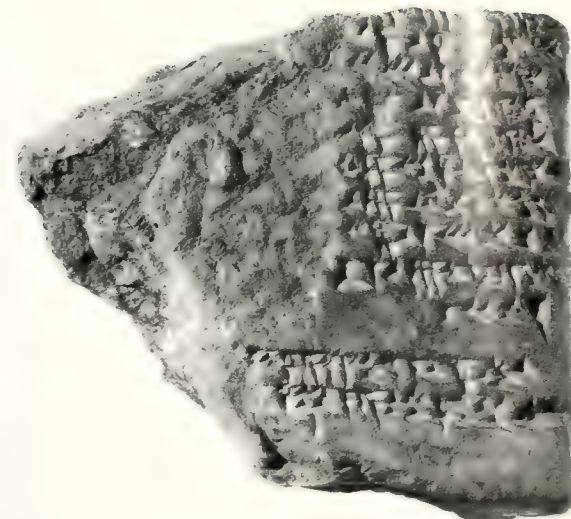
No. 57 (BM 35036) Obv.



No. 57 (BM 35334 +) Obv.



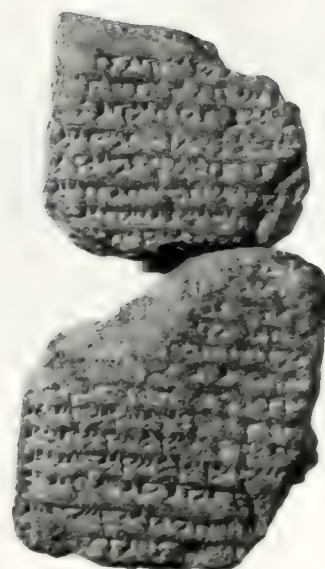
No. 57 (BM 35334 +) Rev.



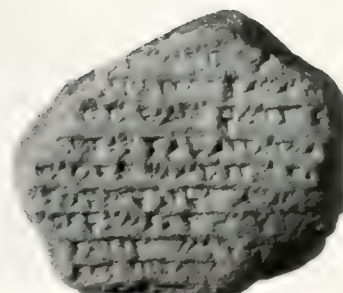
No. 57 (BM 35036) Rev.



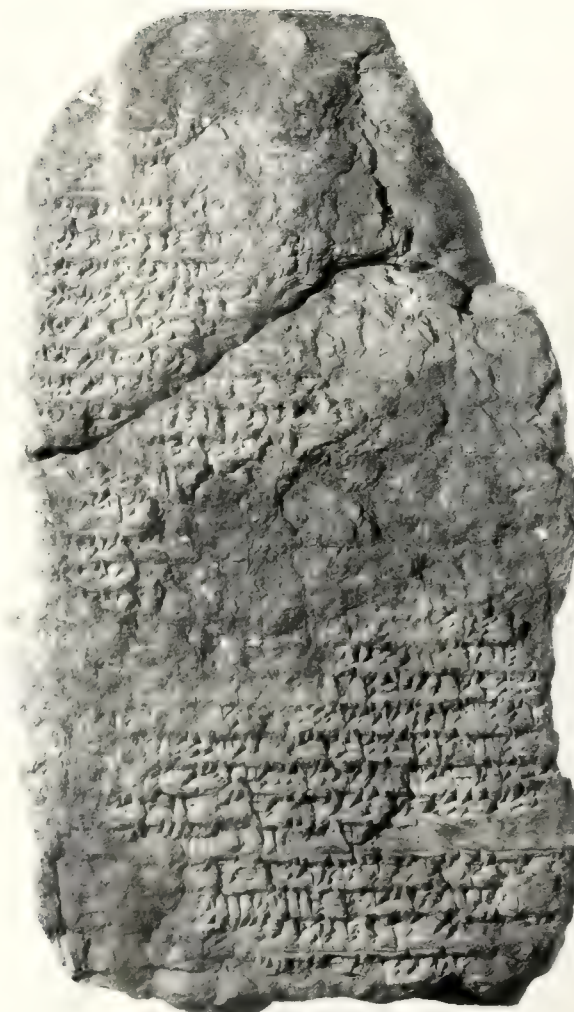
No. 59 (BM 46163)



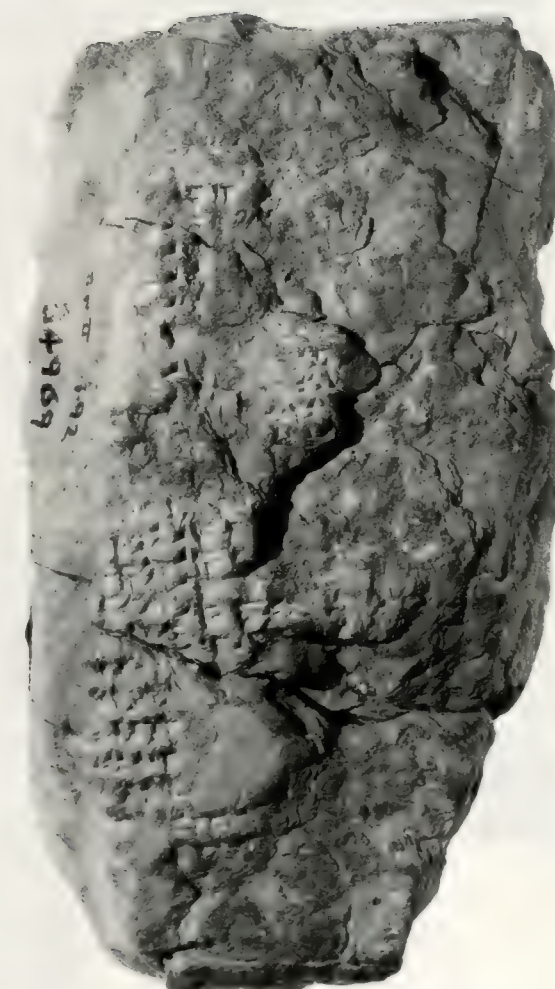
No. 60 (BM 34292 +) Obv.



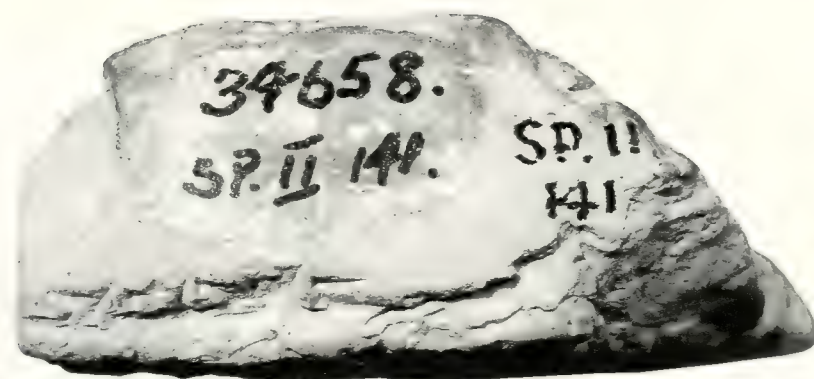
No. 60 (BM 34359) Obv.



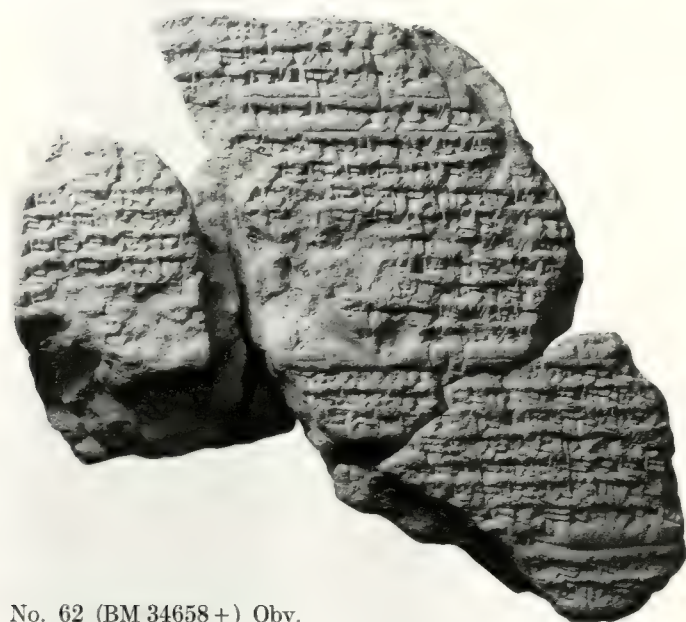
No. 61 (BM 34969 +) Obv.



No. 61 (BM 34969 +) Rev.



No. 62 (BM 34658+) Upper edge



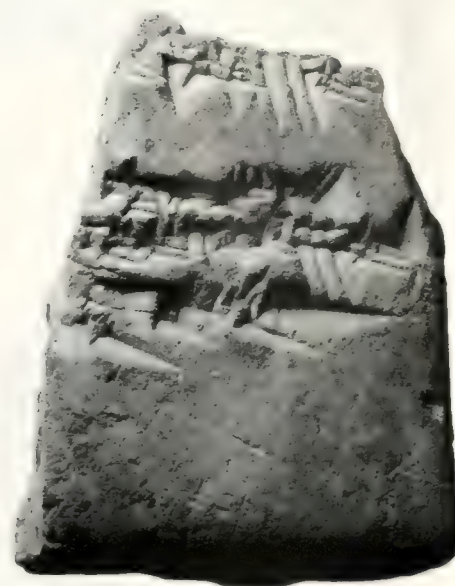
No. 62 (BM 34658+) Obv.



No. 62 (BM 35341) Obv.



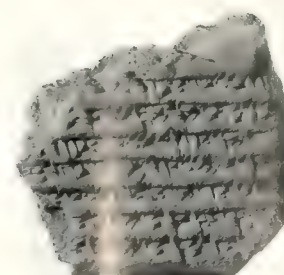
No. 62 (BM 34658+) Rev.



No. 62 (BM 35341) Rev.



No. 63 (BM 34646+) Obv.



No. 63 BM 34411)



No. 63 (BM 34646+) Rev.



No. 63 (BM 34646+) Right edge



No. 65 (BM 34150) Obv.



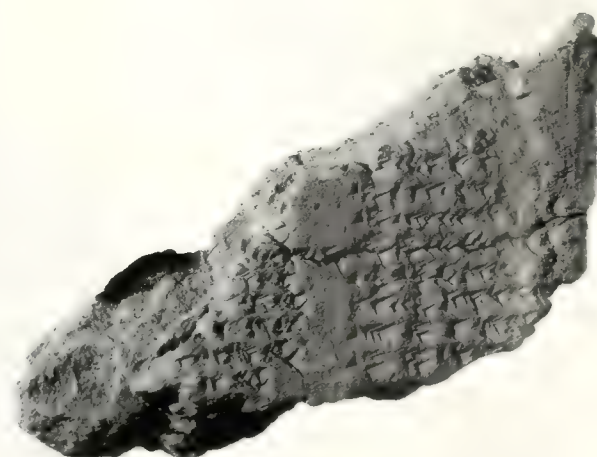
No. 65 (BM 34150) Rev.



No. 68 (BM 38405) Obv.



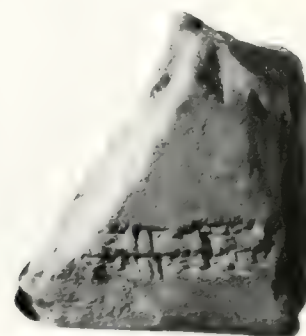
No. 66 (BM 33481) Obv.



No. 66 (BM 33481) Rev.



No. 67 (BM 34186) Obv.

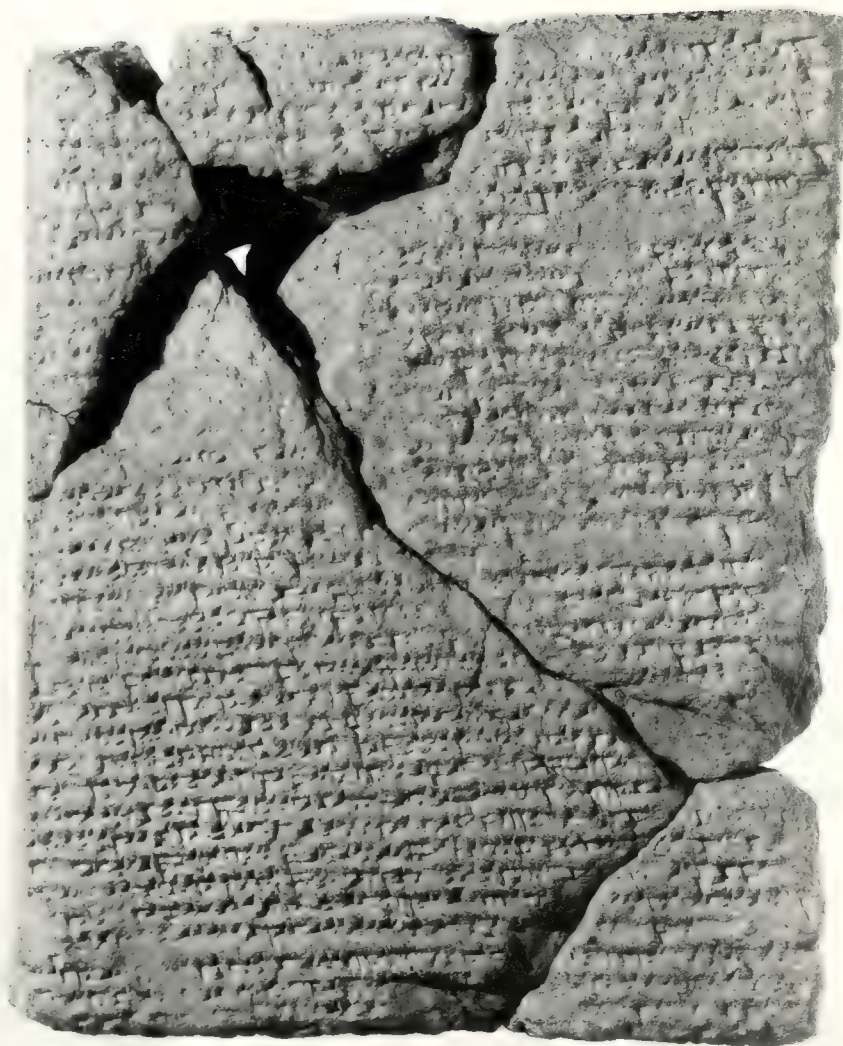


No. 67 (BM 34186) Rev.

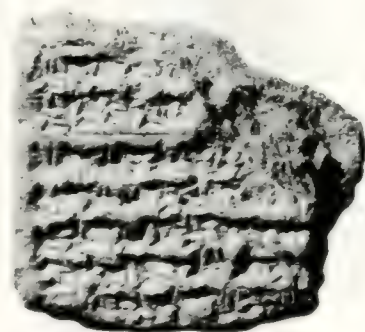


No. 68 (BM 38405) Rev.

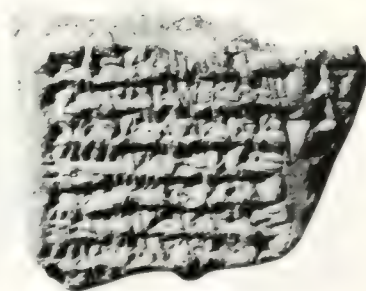




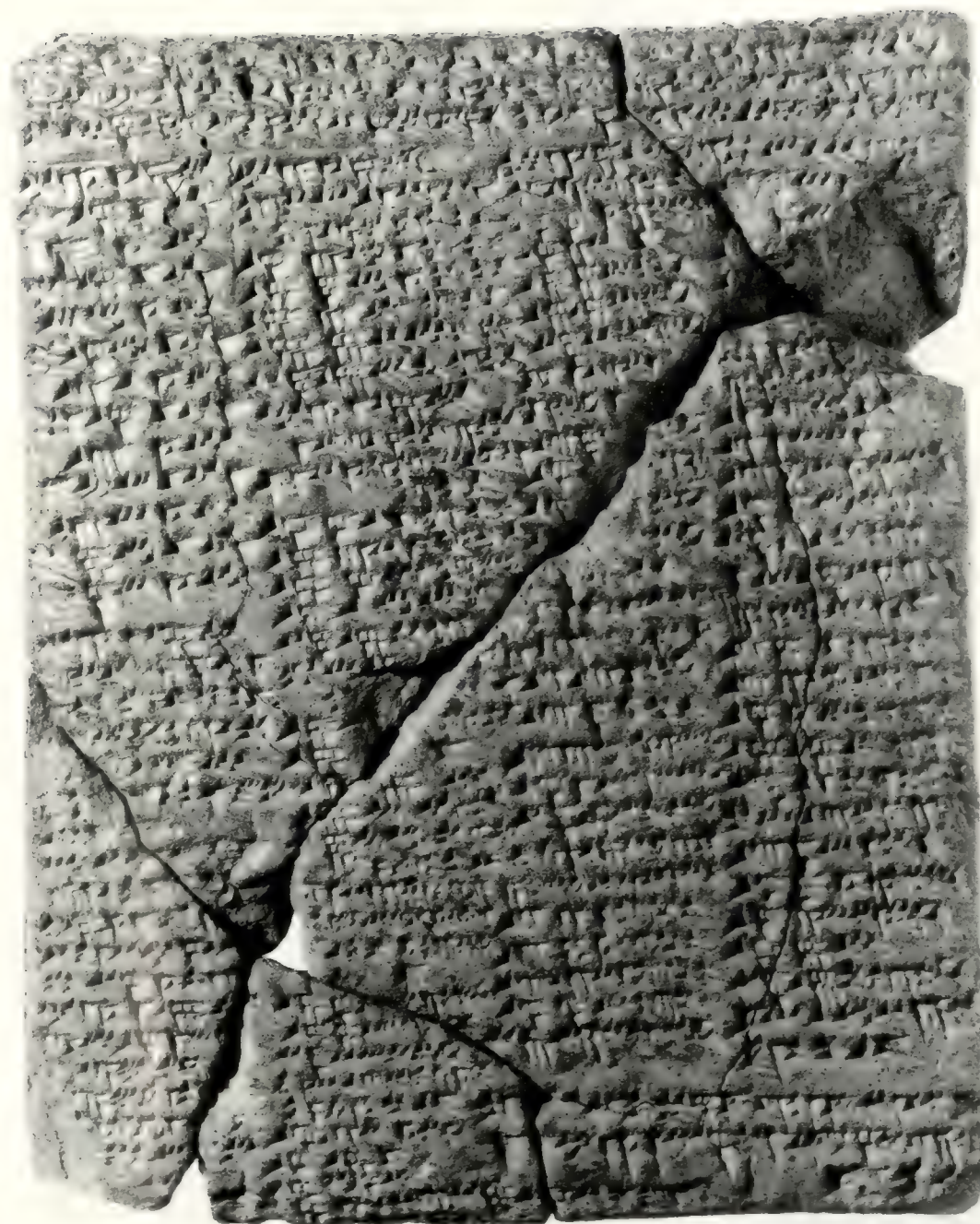
No. 69 (BM 34034) Obv.



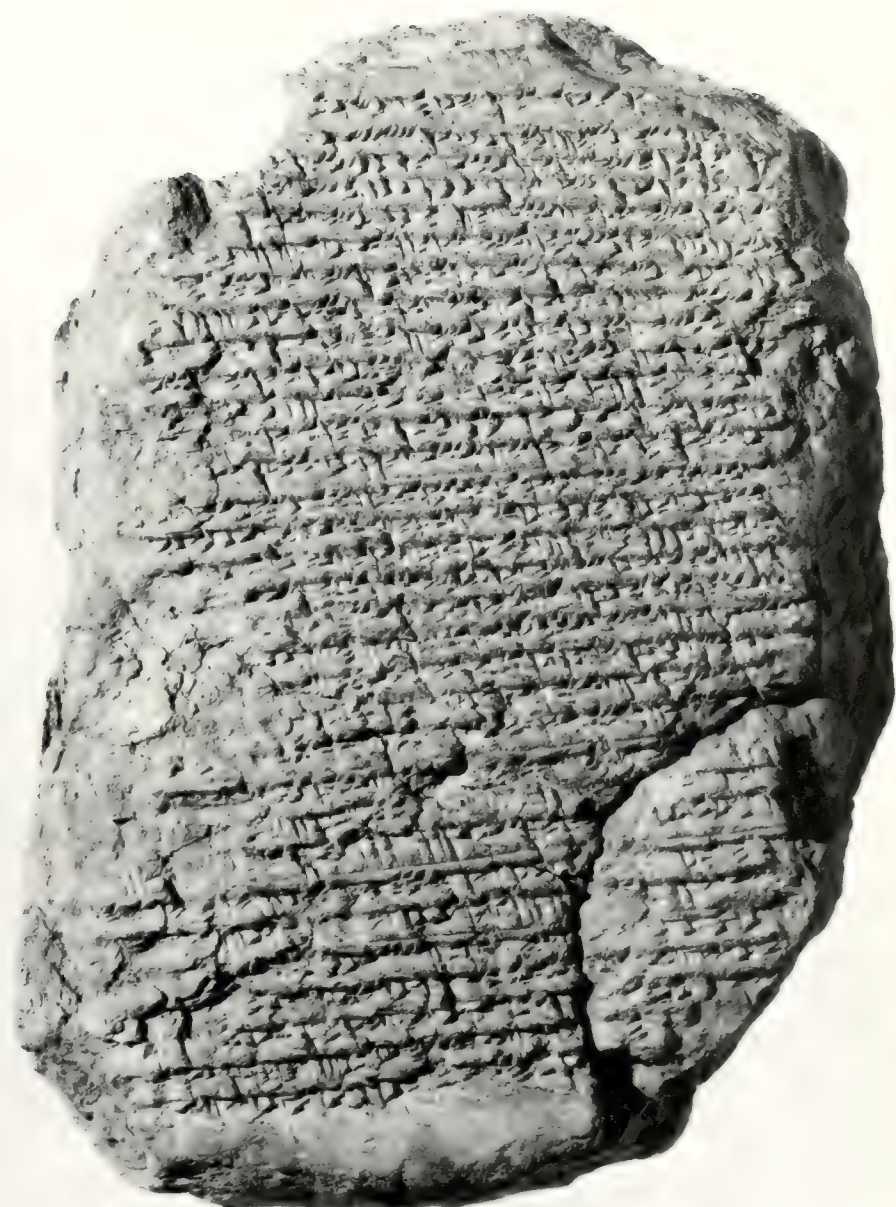
No. 70 (BM 41108) Obv.



No. 70 (BM 41108) Rev.



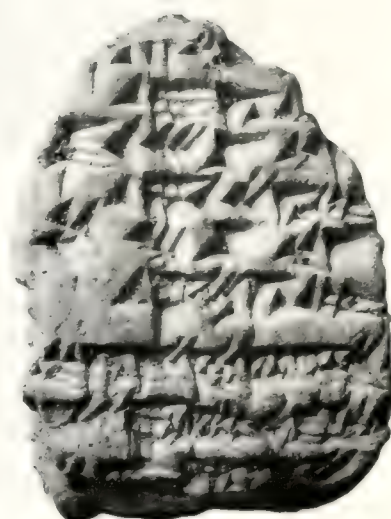
No. 69 (BM 34034) Rev.



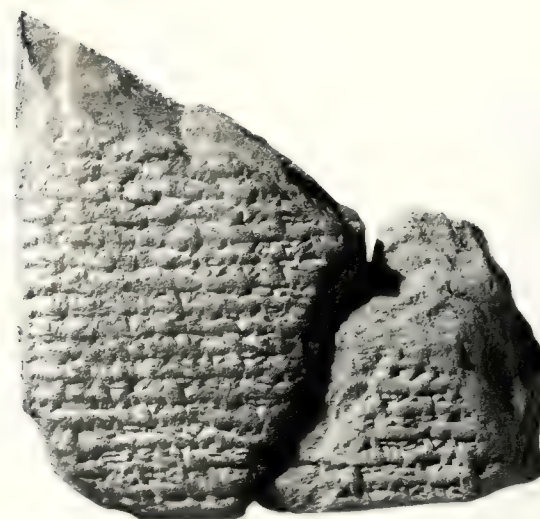
No. 71 (BM 34455+) Obv.



No. 72 (BM 42777) Obv.



No. 72 (BM 42777) Rev.



No. 73 (BM 41958+) Obv.



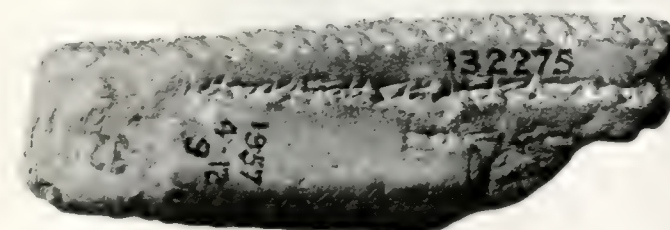
No. 73 (BM 34509) Obv.



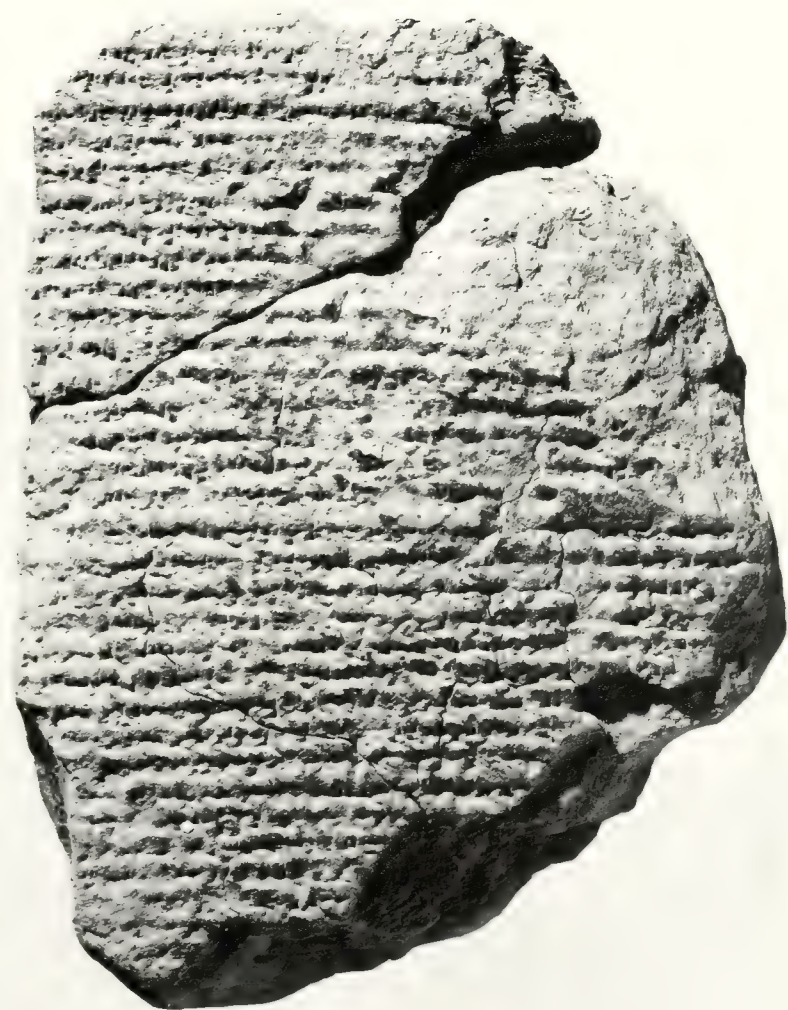
No. 73 (BM 41958+) Rev.



No. 73 (BM 34405)



No. 73 (BM 41958+) Left edge



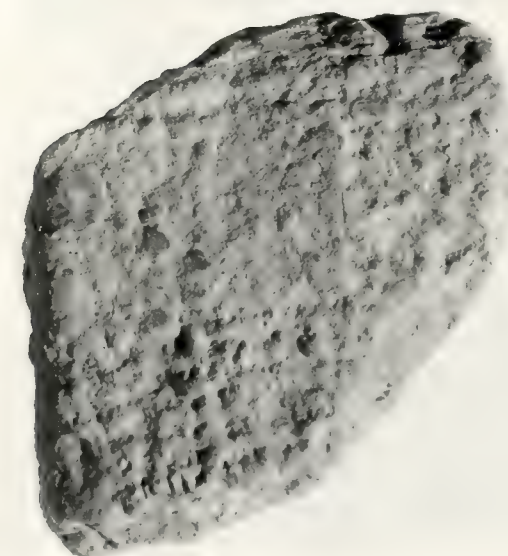
No. 74 (BM 40086+) Obv.



No. 75 (BM 45993) Obv.



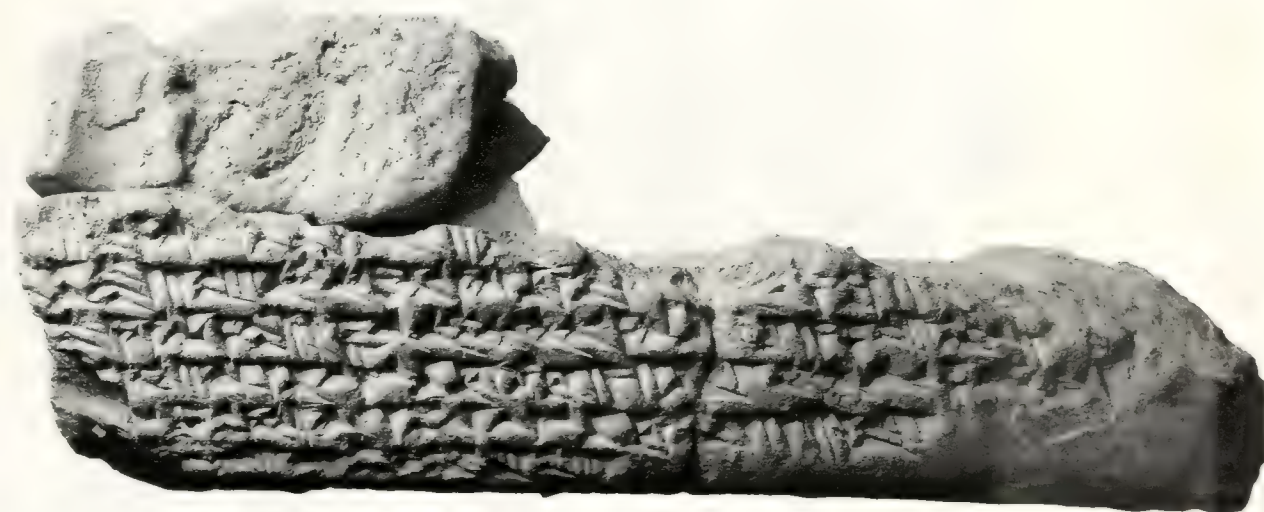
No. 74 (BM 40086+) Rev.



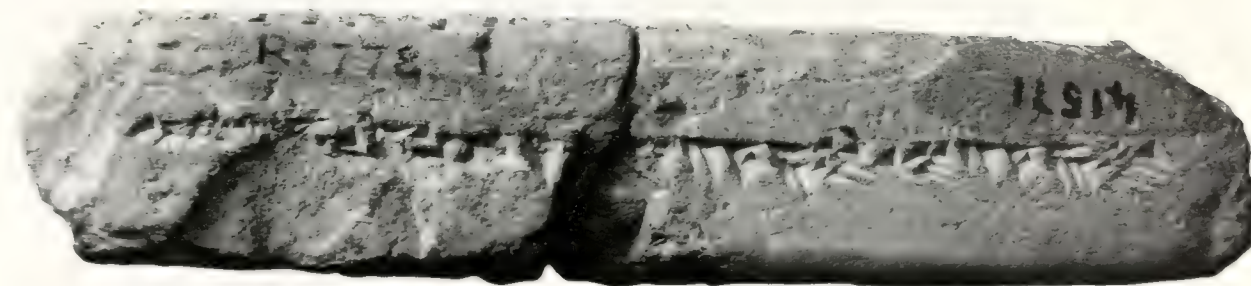
No. 75 (BM 45993) Rev.



No. 76 (BM 41571+) Obv.



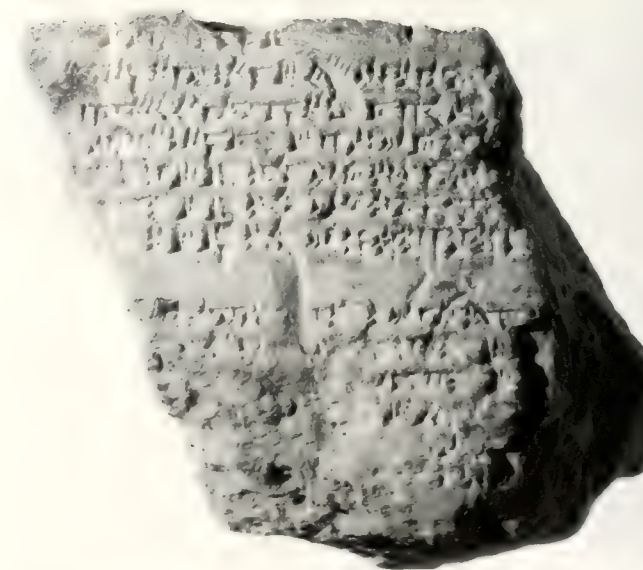
No. 76 (BM 41571+) Rev.



No. 76 (BM 41571+) Upper edge



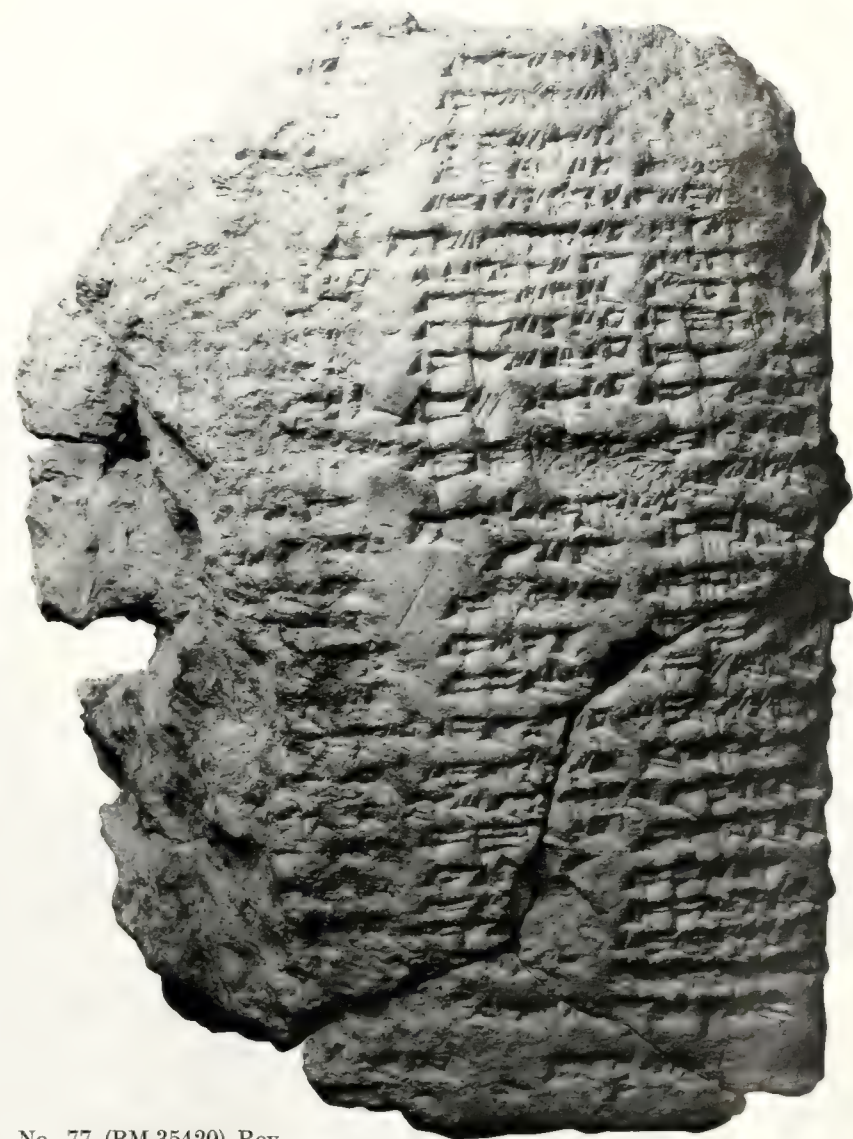
No. 77 (BM 35420) Obv.



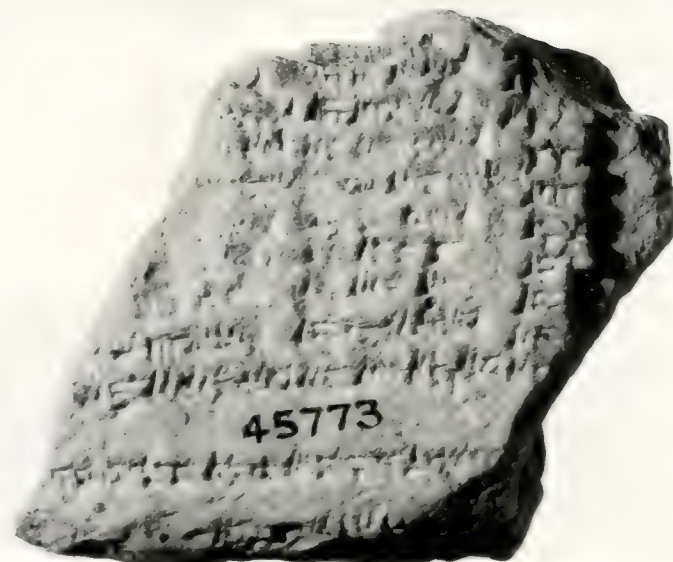
No. 78 (BM 45773) Obv.



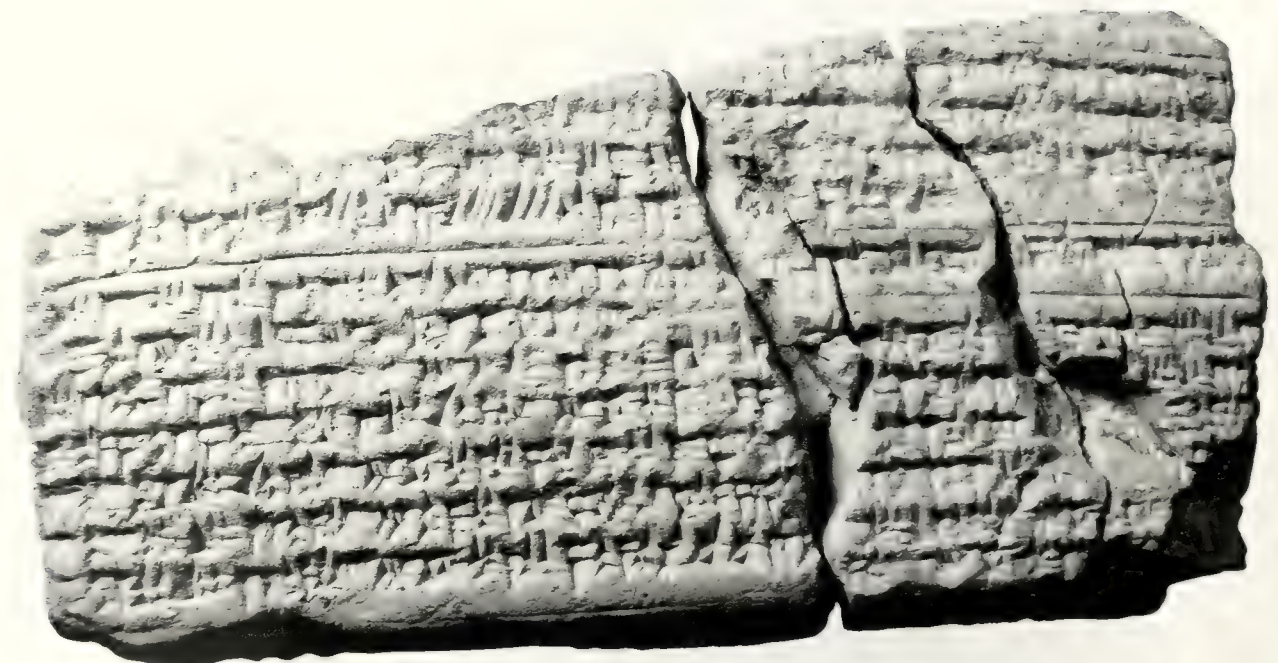
No. 77 (BM 35420) Right edge



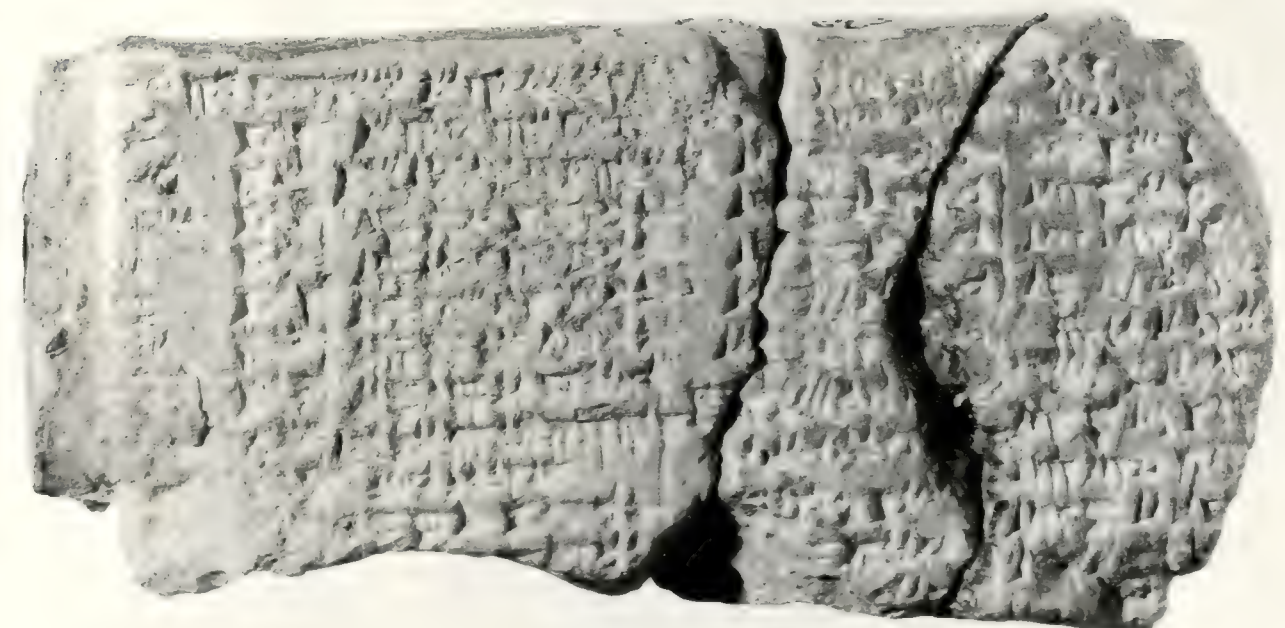
No. 77 (BM 35420) Rev.



No. 78 (BM 45773) Rev.



No. 79 (BM 33457 +) Obv.



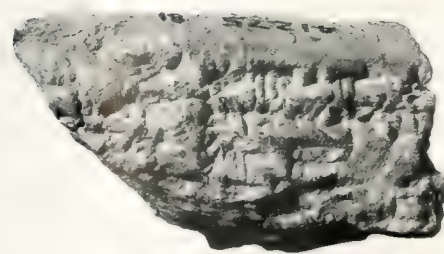
No. 79 (BM 33457 +) Rev.



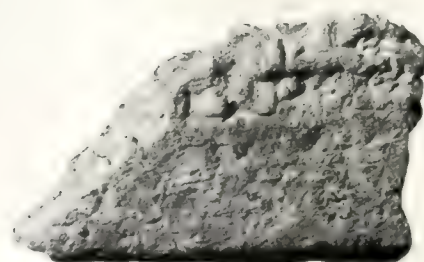
No. 81 (BM 35719) Obv.



No. 83 (BM 34946)



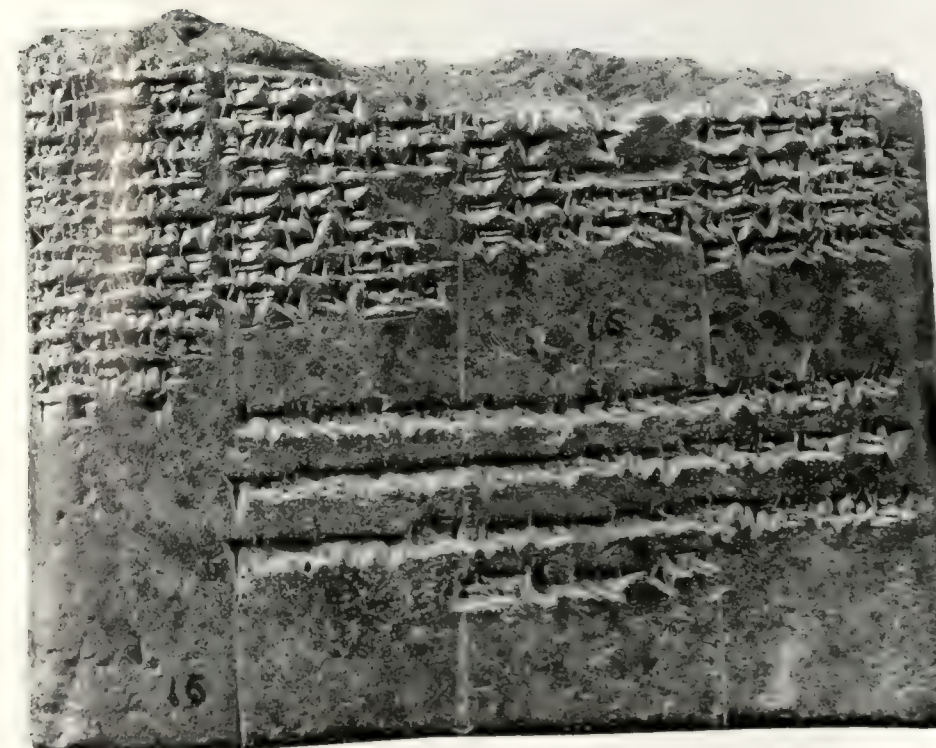
No. 84 (BM 41275) Obv.



No. 84 (BM 41275) Rev.



No. 82 (CBS 17) Obv.



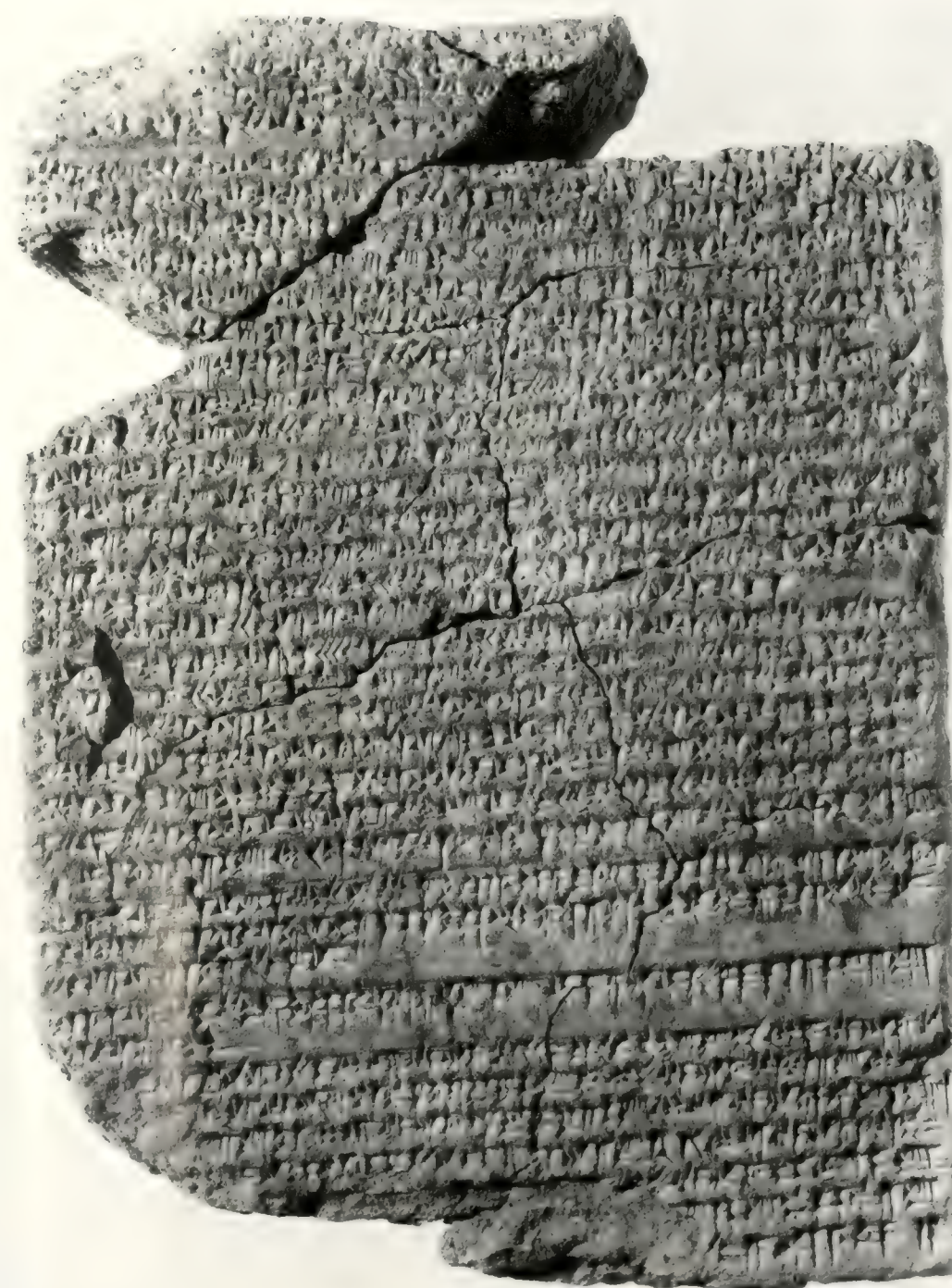
No. 82 (CBS 17) Rev.



No. 85 (BM 35475+) Obv.



No. 85 (BM 35475+) Rev.



No. 86 (BM 34053+) Obv.



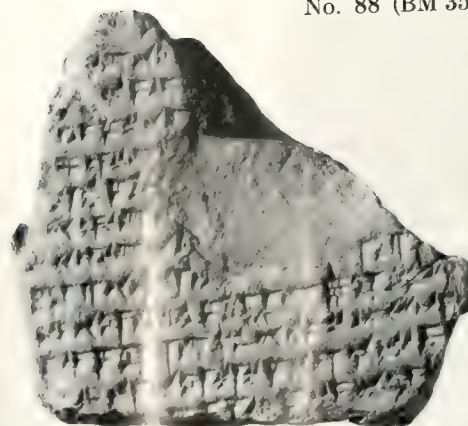
No. 86 (BM 34053+) Rev.



No. 88 (BM 35317) Obv.



No. 88 (BM 35317) Rev.



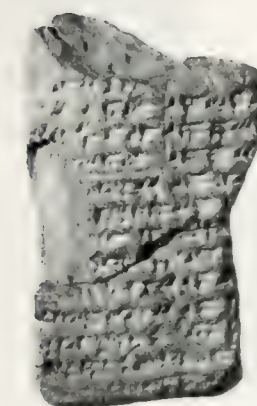
No. 90 (BM 41847) Obv.



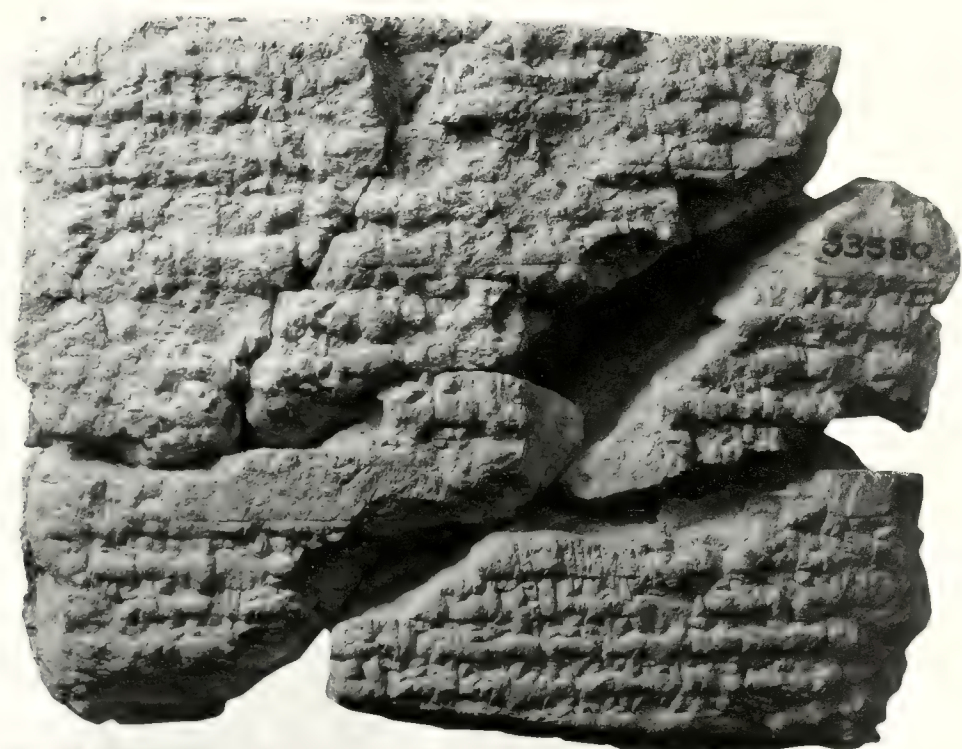
No. 90 (BM 41847) Rev.



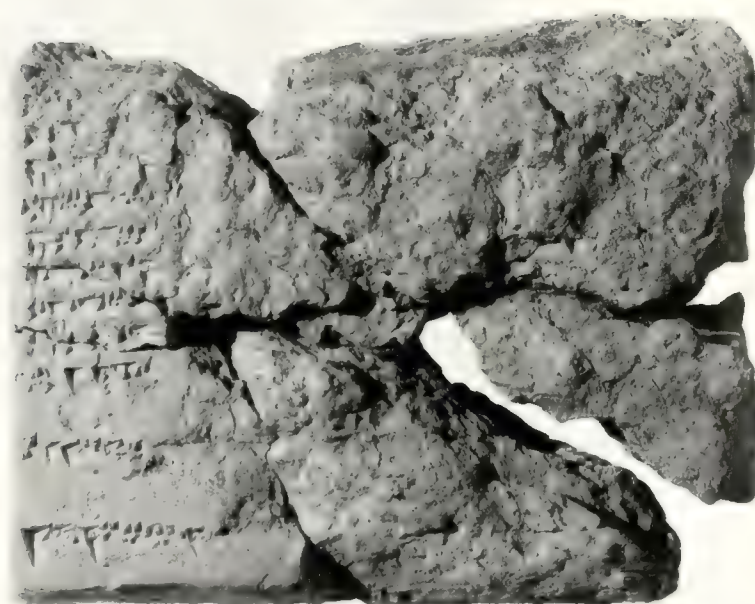
No. 91 (Rm 763+) Obv.



No. 91 (Rm 763+) Rev.



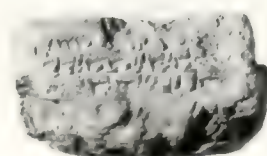
No. 92 (BM 33522 +) Obv.



No. 92 (BM 33522 +) Rev.



No. 93 (BM 33533)



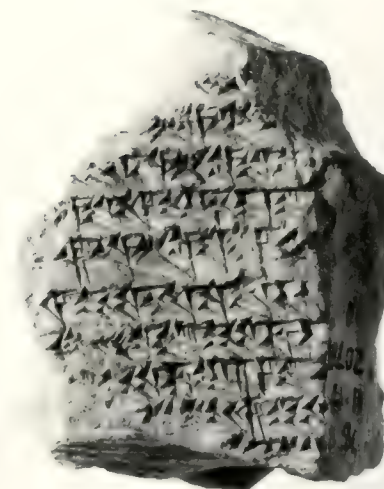
No. 94 (BM 42148) Obv.



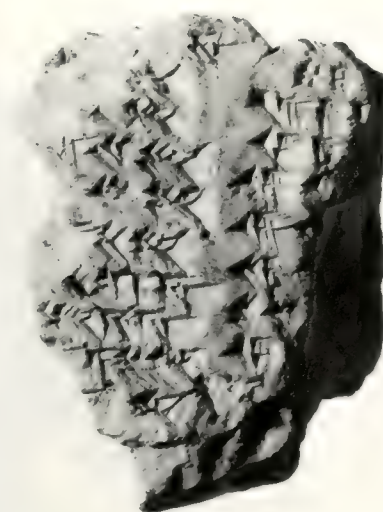
No. 94 (BM 42148) Rev.



No. 95 (DT 207)



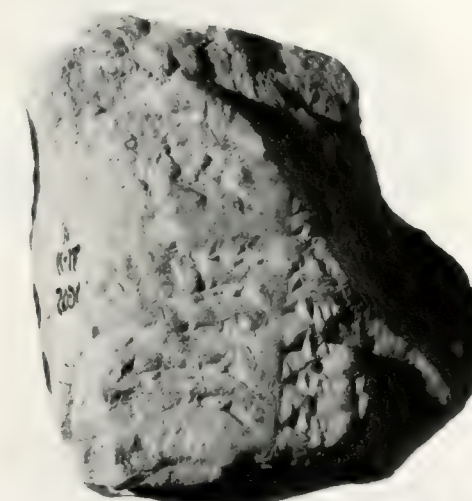
No. 96 (BM 32342) Obv.



No. 96 (BM 32342) Rev.



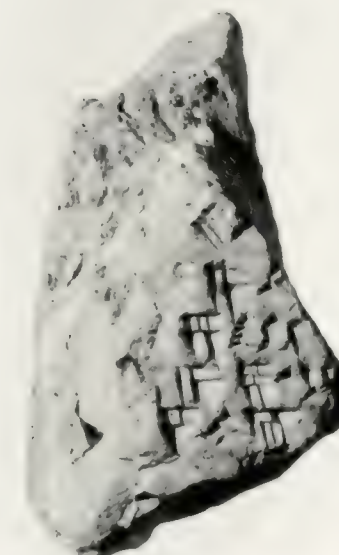
No. 97 (BM 32358) Side A



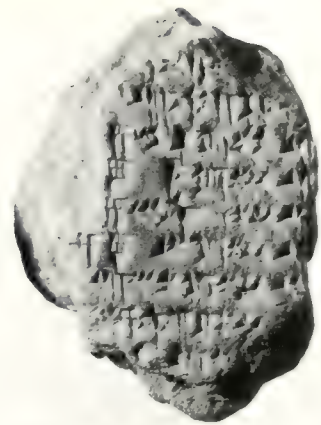
No. 97 (BM 32358) Side B



No. 98 (BM 32426)



No. 99 (BM 32434)



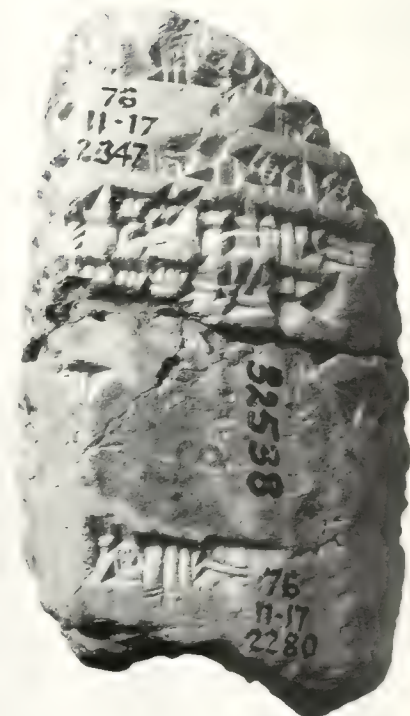
No. 100 (BM 32457)



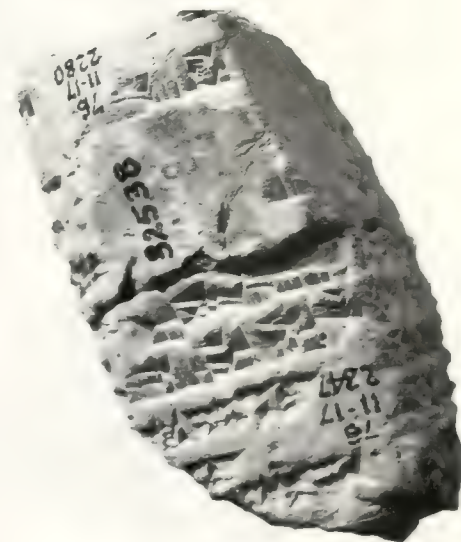
No. 102 (BM 32358+) Obv.



No. 102 (BM 32358+) Rev.



No. 102 (BM 32358+) Right edge



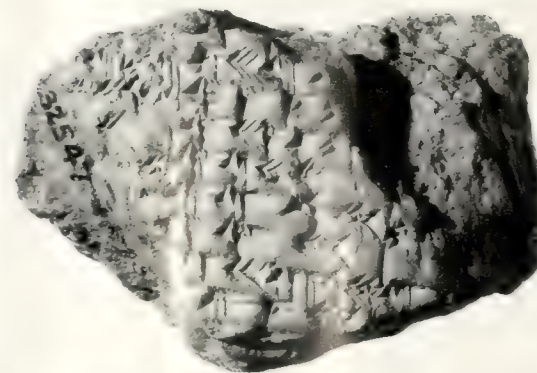
No. 102 (BM 32358+) Right edge



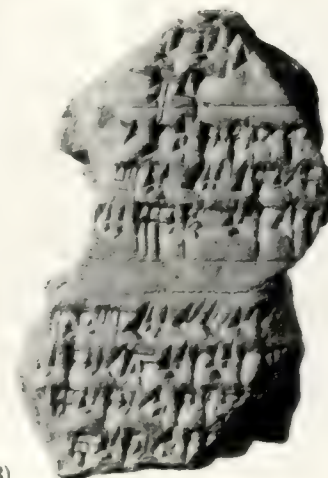
No. 101 (BM 32512) Obv.



No. 101 (BM 32512) Rev.



No. 103 (BM 32547)



No. 105 (BM 32633)



No. 104 (BM 32616)



No. 106 (BM 32770) Obv.



No. 106 (BM 32770) Rev.



No. 107 (BM 32941)



No. 108 (BM 32948)



No. 109 (BM 32964)



No. 110 (BM 33495)



No. 111 (BM 33604) Obv.



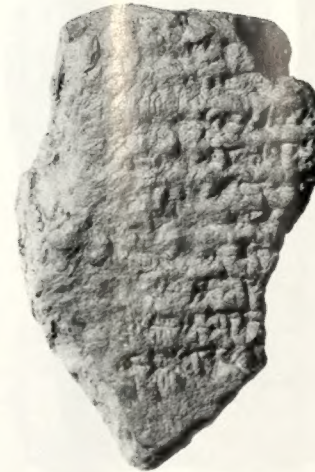
No. 111 (BM 33604) Rev.



No. 112 (BM 33608)



No. 113 (BM 33756)



No. 126 (BM 34408)



No. 128 (BM 34430) Obv.



No. 128 (BM 34430) Rev.



No. 129 (BM 34506)



No. 134 (BM 34889) Obv.



No. 134 (BM 34889) Rev.



No. 136 (BM 34956) Obv.



No. 137 (BM 34996) Obv.



No. 136 (BM 34956) Rev.



No. 137 (BM 34996) Rev.



No. 139 (BM 35168)



No. 149 (BM 37005) Obv.



No. 149 (BM 37005) Rev.



No. 150 (BM 37105)



No. 151 (BM 40114)



No. 153 (BM 40864) Obv.



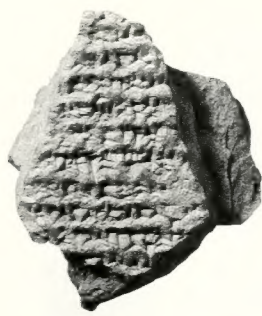
No. 152 (BM 40606)



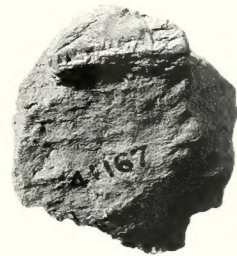
No. 153 (BM 40864) Rev.



No. 154 (BM 40993)



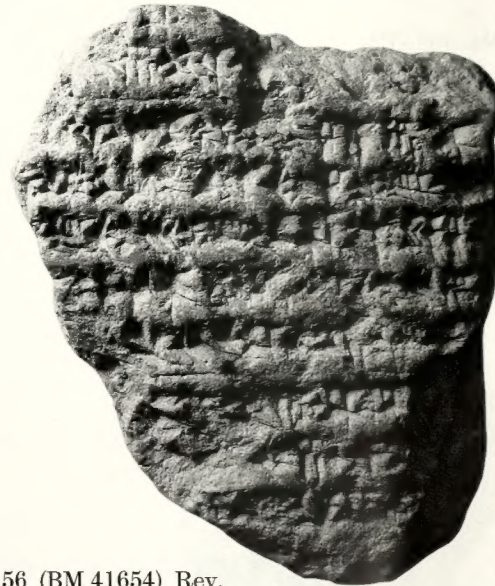
No. 155 (BM 41167) Obv.



No. 155 (BM 41167) Rev.



No. 156 (BM 41654) Obv.



No. 156 (BM 41654) Rev.



No. 157 (BM 41954) Obv.



No. 157 (BM 41954) Rev.



No. 159 (BM 42021) Obv.



No. 159 (BM 42021) Rev.



No. 160 (BM 42106) Obv.



No. 160 (BM 42106) Rev.



No. 162 (BM 42779) Side A



No. 162 (BM 42779) Side B



No. 164 (BM 45815)



No. 165 (BM 45824)



No. 166 (BM 45877)



No. 167 (BM 45880) Rev.



No. 167 (BM 45880) Obv.



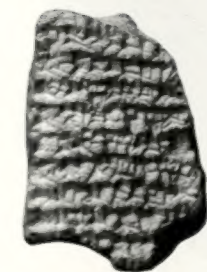
No. 168 (BM 46098)



No. 170 (BM 46103)



No. 172 (BM 46180+) Obv.



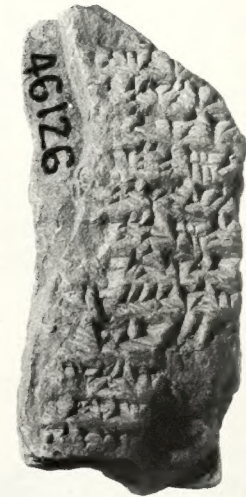
No. 173 (BM 46212) Obv.



No. 173 (BM 46212) Rev.



No. 169 (BM 46100)



No. 171 (BM 46126)



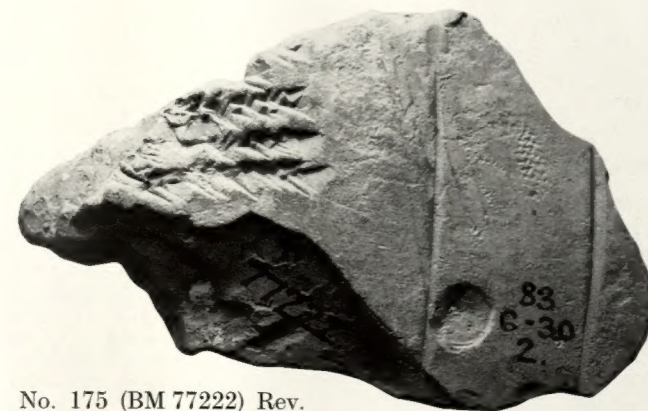
No. 172 (BM 46180+) Rev.



No. 174 (BM 46218)

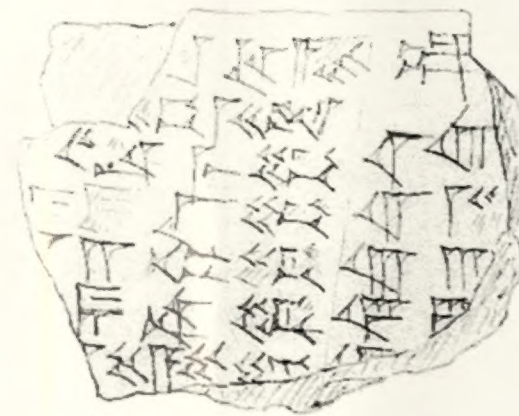


No. 175 (BM 77222) Obv.



No. 175 (BM 77222) Rev.

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No. 176 (CBS 717)



No. 177 (Rm 768)



No. 178 (Rm 835) Obv.



No. 178 (Rm 835) Rev.